FEDERAL AGENT ORANGE ACTIVITIES AND THE VET CENTER PROGRAM

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON VETERANS' AFFAIRS HOUSE OF REPRESENTATIVES

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FEDERAL AGENT ORANGE PROGRAMS AND THE VET CENTER PROGRAM

WEDNESDAY, SEPTEMBER 15, 1982

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 8:30 a.m., in room 334, Cannon House Office Building, Hon. G. V. (Sonny) Montgomery (chairman of the subcommittee) presiding.

Present: Representatives Montgomery, Stump, Mica, and Sawyer.

Also present: Representatives Mottl, Edgar, Daschle, Dorgan, Heckler, McEwen, and Dunn.

OPENING STATEMENT OF CHAIRMAN MONTGOMERY

Mr. MONTGOMERY. The subcommittee will come to order. We are meeting this morning to receive testimony on the status and activities of the Federal Government concerning the agent orange issue, including the Veterans' Administration study mandated by Public Law 96-151 and expanded by Public Law 97-72, as well as to review the VA's implementation of the medical treatment authorized by Public Law 97-72. We will also receive testimony on the veterans' readjustment counseling program established by Public Law 96-22.

Our committee has held seven hearings exclusively on agent orange. In keeping with my previous statements at hearings on this subject, I want to say again that this subcommittee, as well as all members of the full committee, are eager to obtain objective and thoroughly scientific facts concerning agent orange and its possible harmful health effects on our Vietnam veterans. We all realize that there are no quick answers to this disturbing problem, but we do desire that the Federal Government's scientific agent orange acitivities provide energetic leadership in obtaining timely answers. In December 1979, a Presidential interagency working group was formed to study the possible long-term health effects of phenoxy herbicides and contaminants, and to coordinate all Federal research efforts regarding agent orange and other herbicides. President Reagan has elevated the group's status to the Cabinet Council on Human Resources to emphasize its importance. The interagency working group is now composed of the Department of Health and Human Services, the lead agency; the Department of State; the Department of Defense; the Department of Labor; the Office of Management and Budget; the White House Office of Policy Develop-

ment: the Council of Economic Advisors; ACTION; the Environmental Protection Agency; the Veterans' Administration; and the White House Office of Science and Technology Policy. The Congressional Office of Technology Assessment is an observer. The group is presently overseeing 46 Federal studies and research projects on pheonxy herbicides and their contaminants, which is a clear illustration of the time, effort, and funding that has or is being expended in the Federal arena and demonstrates the Government's positive efforts to seek answers to the agent orange question. In line with the interagency working group recommendation, the Air Force has commenced its study of Operation Ranch Hand personnel who were Air Force personnel involved in the spraying of herbicides in Vietnam. We look forward to hearing testimony concerning their activities.

As you all know, Public Law 96–151 mandated that the Veterans' Administration conduct a study of veterans exposed to the herbicide agent orange and one of its components, dioxin, and that the Office of Technology Assessment [OTA] approve the study protocol. Public Law 97–72 expanded the study to include additional factors such as exposure to other herbicides, chemicals, medications or environmental hazards or conditions. The Administrator, if he so desires, may also expand the study to include the means of detecting and treating the adverse health effects, if any, found through the study and/or review of the world literature on phenoxy herbicides.

We will hear from the Veterans' Administration concerning the implementation of these laws. Additionally, we will receive testimony from a representative of the Department of the Army regarding the Army agent orange task force program. I am pleased that State Senator Karl Berning, the chairman of the State of Illinois' Agent Orange Study Commission and his cochairman, State Representative John O'Connell, will provide us with information concerning their agent orange activities. Finally, we will hear testimony from several veterans' service organizations, and a representative of the National Veterans Law Center.

The second item on the agenda today will be the veterans' readjustment counseling program which was extended until September 30, 1984, by Public Law 97–72. We wish to learn of the current status of the program and if there are any problems, which should be brought to our attention.

Since these two subjects are of great interest to members of our Subcommittee on Hospitals and Health Care, which originated Public Law 97–72, I have asked members of that subcommittee to sit with us this morning and participate in any manner they wish.

Due to the number of witnesses this morning, it is requested that the witnesses limit their oral testimony to 5 minutes.

As soon as Mr. Hammerschmidt, the ranking Republican member arrives, I will recognize him.

Since he has not yet arrived I would like to call on Congressman Tom Daschle of South Dakota, a member of the full committee, who serves on the Hospitals Subcommittee and has been very active in Vietnam veterans legislation, and is also president of the House Vietnam veterans group, and was one of those ones—in fact, he was the author—of giving the privilege to a Vietnam veteran of

going into a veterans hospital and to be examined and tested pertaining to agent orange.

Congressman Daschle, we will be very glad to hear from you at this time.

STATEMENT OF HON. THOMAS A. DASCHLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. DASCHLE. Mr. Chairman, I want to thank you and staff for again holding what I think to be a very productive hearing on this issue.

I appreciate your willingness to allow me to testify. This is the first time I have ever testified before the committee, but I think it is important that we talk about this issue and I want to discuss it for just a moment.

In my 4 years in the Congress I doubt that I have faced an issue as frustrating and as perplexing as agent orange. Nonetheless, a major step was achieved last year with the passage of legislation, Public Law 97-72, approving priority health care and medical treatment for Vietnam veterans suffering from the effects of agent orange.

The House and Senate unanimously agreed that this was a necessary and reasonable step to assure that Vietnam veterans have the concern and the attention of the Congress until the various scientific studies shed more light on the complexities of this issue.

From the very beginning I have had doubts about the Veterans' Administration's ability and commitment to fulfill the mandate of Public Law 96-151, however, which ordered that the VA conduct an epidemiological study into the effects of agent orange on Vietnam veterans.

Unfortunately, Mr. Chairman, I believe that my worst fears have come true. I believe that certain parties within the VA are now deliberately trying to delay the agent orange study.

Mr. Chairman, this study was ordered nearly 3 years ago, and to this date it hasn't even begun. I believe the reason the VA is delaying the inception of this study is they do not want to face the ultimate decision of compensating Vietnam veterans and their families.

This is evidenced by the fact that the VA has still not developed a statutory framework for the resolution of veterans claims, despite the fact that a number of scientific studies outside the VA will be completed within the next several months.

To add insult to injury, the VA has admitted that it will be 1988 or 1989 until this study is completed. This is unacceptable, and frankly I am outraged.

This past March two scientific review panels, the Office of Technology Assessment and the White House Agent Orange Work Group Scientific Panel, approved a protocol design for the VA study, as well as an exposure index developed by the agent orange task force in the Army.

The exposure index will be used in selecting study cohorts of veterans who were or were not exposed to the herbicide during their service in Vietnam. Virtually every relevant agency in the Federal Government is represented on the science panel or the work group,

including the Departments of Defense, Labor, Health and Human Services, Agriculture, EPA, OMB, the National Cancer Institute, the Centers for Disease Control, the National Institute of Occupational Safety and Health, the National Institute of Environmental Health Sciences, OTA, the VA, and others.

Despite the approval of all these agencies, the VA in May, 4 months after submitting the second protocol design to the science panel and OTA, said that yet another scientific review is necessary. This additional review, conducted by the National Academy of Sciences, is still underway.

Then in July, the VA announced to the science panel that the exposure index previously agreed to needed further refinement. Today, 6 months after the initial agreement on the index had been reached, and 2 months after announcing their dissatisfaction to the science panel, the VA has still not finalized and sent to the DOD the changes they now seek to make so the agent orange task force can continue their process of cohort selection.

The VA has had innumerable problems since this effort first began, including the rejection of the initial protocol design. I believe these problems have been the direct result of a lack of in-house expertise in the area.

At this very moment, Mr. Chairman, the VA still does not have an epidemiologist on board, and I believe that many of their problems are related directly to this lack of in-house expertise. A full-time epidemiologist should be hired immediately so that crucial decisions relative to the study are made by an expert in the field.

Mr. Chairman, the delays in this study are an unconscionable affront to the dignity of Vietnam veterans and their families. Vietnam veterans will not stand for it, the American people should not stand for it, nor should the U.S. Congress.

Unless the VA decides on the final exposure criteria, as well as whether to include a third cohort of veterans who didn't serve in Vietnam within 7 days of this hearing and begin a planned pilot study within 30 days, I believe that this committee should take action to relieve the VA of all responsibilities relative to this long-delayed study. I am having legislation drafted at this moment to achieve this end.

Finally, it is time to take action with respect to compensating Vietnam veterans with soft tissue cancers. Three Swedish epidemiological studies have documented increased soft tissue cancer rates in Swedes exposed to herbicides containing dioxin. In addition, a National Institute of Occupational Safety and Health dioxin registry has revealed significantly higher rates of soft tissue cancers in U.S. industrial workers exposed to dioxin.

Considering this plethora of scientific data and the fact that soft tissue cancers are exceedingly rare in young age groups, compensation is not out of order.

Mr. Chairman, the Vietnam veterans deserve better than to wait until 1988 or 1989 for the VA to provide answers. Every other government body now conducting research on agent orange, including the Air Force and the Centers for Disease Control, will be providing clues to the specific hazards of agent orange no later than next year. Even the Australian Government, which sanctioned their

own studies long after Congress was forced to order a study, expect to complete all of their efforts next year.

Franklin Delano Roosevelt once said, "The only limits on the realization of tomorrow are the doubts of today." Mr. Chairman, there are too many doubts of today. Those doubts have been extended unnecessarily now for more than 3 years.

If indeed we are going to realize the benefits that we all want on this committee on agent orange, if we are going to realize a program that will establish a decent program for these veterans, then I think the doubts must be eliminated, the study must go on, and it must go on now.

I thank you all very much for giving me this opportunity to share my thoughts with you this morning.

Mr. MONTGOMERY. I would like to thank the gentleman for participating this morning. We would like to invite him up to sit with the subcommittee. I would like to assure the gentleman that that is the reason for the hearing—to see if the Veterans' Administration is dragging its feet.

Also, we do have Dr. Custis here the Director of Medical Care for the Veterans' Administration, to testify. Dr. Custis, I am sure, will answer some of these questions, as well as other witnesses from the Federal Government.

If the gentleman would like to join us, we would like to have him.

Mr. DASCHLE. Thank you, Mr. Chairman.

Mr. MONTGOMERY. I believe Mr. Mottl, who is the chairman of the Subcommittee on Hospitals for this committee, would like to make a statement.

Mr. Edgar?

Mr. EDGAR. Mr. Chairman, before our colleague, Mr. Daschle, leaves the podium, is it possible to make a statement and comment about his statement?

Mr. MONTGOMERY. OK. Let me recognize Mr. Mottl, and then we will recognize Mr. Edgar for a statement directed at Mr. Daschle.

Mr. EDGAR. Thank you, sir.

STATEMENT OF HON. RONALD M. MOTTL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. MOTTL. Thank you very much, Mr. Chairman.

I want to commend you for holding this hearing on agent orange and the vet center program this morning, Mr. Chairman.

I am pleased to see the growth in the number of vet centers run by the VA. When we passed H.R. 3499, there were 91 centers. Today there are 133 fully operated vet centers, plus 306 facilities providing contracted services.

The vet centers have gained acceptance among Vietnam veterans, and there is a demonstrated need for the counseling services they provide. Without the action of this committee and Congress last year, however, all vet centers would have been permanently closed.

As you know, H.R. 3499, which was enacted into Public Law 97-72, also provided for expansion in the scope of the study on agent orange. As an important precedent, it also ordered the VA to pro-

vide health care to veterans when an authorized physician says there may be suffering from exposure to agent orange.

The use of agent orange and other defoliants in Vietnam have been blamed for causing a variety of serious medical ailments among veterans exposed to the chemicals while serving their country.

Unfortunately, Congress said in Public Law 97–72 that the law cannot be construed as involving service-connection or disability compensation under chapter 11 of title 38. This, I feel, must be remedied.

Although Congress broke new ground with the provision of health care for conditions that may be associated with agent orange exposure, it should take the next necessary step of providing compensation for those veterans suffering disabilities from the exposure. The same reasoning that justifies health care should also require compensation.

My colleague, Tom Daschle, has introduced H.R. 2493 to provide a presumption of service-connection for those Vietnam veterans suffering from exposure to agent orange. I am cosponsor, and I urge my colleagues to support this bill.

I would also say, in conclusion, Mr. Chairman, that I endorse the comments of my colleague from South Dakota. He should be commended. I want to join with him in the new bill which will be introduced on soft tissue cancer, and I just want to commend him ever so much for leading the fight for the Vietnam veteran with regard to agent orange. I want to march along with him. I think there should be compensation at this point at least on the presumption.

Thank you.

Mr. MONTGOMERY. Thank you, Mr. Mottl.

The Chair would like to recognize the chairman of the Subcommittee on Education, Bob Edgar.

STATEMENT OF HON. BOB EDGAR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. EDGAR. Thank you, Mr. Chairman.

Tom, I sought this time simply to congratulate you for your statement and also to share your impatience. I have been on this committee for 8 years, and under our chairman, Mr. Montgomery, we have done a lot of good things in the area of Vietnam veterans. I think we have moved the consciousness of this committee up 100 percent in terms of its concern not only for the readjustment counseling centers, but also on the issue of agent orange.

I think we now have to make that next step; that is, to force either the VA or some separate entity to do the study on a much more accelerated basis so that we can determine causality between the use of the defoliants in Vietnam and the systemic diseases that we are experiencing.

Mr. Chairman, I would like to ask unanimous consent to include in the record at this point a speech by Mr. D. Volcker, Chairman of the Repatriation Commission and Secretary of the Department of Veterans' Affairs in Australia, which was made to the U.S. Veter-

ans' Administration Advisory Committee here in Washington on August 31, 1982.

In that speech, he included a number of step-by-step analyses of how the country of Australia responded to this problem of agent orange in a much more expeditious way than we have here in this country.

As you mentioned in your testimony, they were able to take the issue to heart, to respond to it in a positive way, and to not take the long and aggressive steps that we have taken to delay time and time again these studies.

Unfortunately, I am not going to be able to stay for the whole hearing this morning. I want to commend my colleagues to ask some tough questions of the VA as they come before this committee. I think we have to know when and how the study will be completed.

I think we need to have some guidelines as to how we can judge the effectiveness of that study so that we don't sit here 2 years from now or 3 years from now and have the VA or other agencies say to us that we need additional research and additional information.

Studies have been done in a number of scientific areas. We need to read those studies carefully with some expertise, then we need to respond because it is our obligation as a nation not to neglect those who have suffered damage because of their service in time of war just simply because we have financial problems in the United States. I share your frustration, your concern and your anxiety.

Mr. Chairman, I ask unanimous consent that this speech be included in the record.[1]

Mr. MONTGOMERY. Without objection, the speech will be included.

Mr. Stump, do you care to comment?

Mr. STUMP. No, thank you, Mr. Chairman.

Mr. DASCHLE. Mr. Chairman, if I could respond to both my subcommittee chairmen, I want to thank them for the diligence they have shown on this issue in the last couple of years and thank them as well for their support as we try to put pressure on the VA and certainly try to find some answers in the very near future about the crisis that so many of these veterans are now facing.

Thank you so much for your time.

Mr. MONTGOMERY. Thank you.

The Chair would like to welcome CBS and "60 Minutes" to the hearing on this important situation. I guess this is the first time this committee has had a national news service come in, and we are flattered.

However, we would like to invite you back when we get into the other veterans areas, such as burial benefits, compensation for the service-connected and other areas that affect all veterans.

The Chair would like to call the first witness, Mr. Bart Kull, Special Assistant to the Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services.

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[1] See p. 110.

Mr. Kull, we would appreciate it if you would limit your oral testimony to 5 minutes—I know the time is very restrictive—to give the members of the committee a chance to ask certain questions. Your full statement, without objection, will be put in the record.

STATEMENT OF BART KULL, SPECIAL ASSISTANT TO THE DEPUTY UNDER SECRETARY FOR INTERGOVERNMENTAL AFFAIRS, DEPARTMENT OF HEALTH AND HUMAN SERVICES, ACCOMPANIED BY VERNON HOUK, ACTING DIRECTOR, CENTER FOR ENVIRONMENTAL HEALTH, CENTERS FOR DISEASE CONTROL

Mr. KULL. Thank you very much, Mr. Chairman, and members of the committee. I have abbreviated my statement for this purpose, as you outlined.

I am Bart Kull, the Special Assistant to the Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services, and Alternate Chair of the Agent Orange Working Group of the Cabinet Council on Human Resources.

I am pleased to have this opportunity to appear before the Subcommittee on Oversight and Investigations to report on the activities of the Agent Orange Working Group.

I am accompanied today by Dr. Vernon Houk, the Acting Director of the Center for Environmental Health of the Centers for Disease Control, who chairs the Working Group's Science Panel.

Mr. Chairman, I believe the administration, the Congress, this committee, members of the Working Group and veterans share a common commitment and goal. As I testified before the Senate Veterans' Committee last November, the concerns of possible long-term adverse health effects as a result of exposure to agent orange are very real. They demand answers, they demand the kind of deliberate, objective research that will provide those answers.

We share a responsibility to turn aside demands for quick and easy answers based on assumptions rather than facts. We also share a responsibility to turn aside from any interest that might seek to sweep this issue under the rug or unnecessarily delay its resolution. We seek the truth of this matter and to reveal openly as much truth as can be found.

I can assure you that a great deal of seeking is being done. I am pleased to report to you that those efforts show promise of bearing fruit in the foreseeable future. For example, the Centers for Disease Control's birth defects study is collecting data on 7,500 families in the Atlanta area who have given birth to children with major structural malformations. A controlled group of 3,000 case families who have given birth to structurally normal children during the same time period have been gathered.

The children of those who served in Vietnam will be identified, and if the study demonstrates that Vietnam veterans are at increased risk of fathering a child with birth defects, it must be determined, if possible, whether the increase is associated with exposure to agent orange or to some other factor. The CDC expects to report out preliminary results of that study by late fall 1983.

The Centers for Disease Control's National Institute of Occupational Safety and Health reports steady progress in the develop-

ment of the worker dioxin registry. The registry will include work and exposure histories of persons engaged in the manufacture of compounds related to 2,4,5-T, the component of Vietnam veterans containing dioxin.

The intent of this registry is to determine whether or not these industrial workers are at greater risk of unusual patterns of illness or death as a result of their association with the chemical.

Since 1979, NIOSH has been collecting work histories, going back to the 1940's. The preliminary analysis of the early results will occur in late 1983, next year.

The Air Force Ranch Hand Study is expected to yield preliminary results in late fall 1983. Pilots and other assigned personnel of the code-named Ranch Hand aerial spraying project of the Vietnam conflict are participating, and these men were heavily exposed to agent orange.

An equal number of matched controls has been selected. Generally, the working group believes the study is progressing as planned, with good participation by the subjects. We will defer to the Air Force Deputy Surgeon General, Major General Chesney, who will inform the committee of the current status of this study.

I said fall of 1983. I have since been informed that that is a rather conservative figure, that the Air Force anticipates having this preliminary result by April–June 1983, which is encouraging.

Two Veterans' Administration studies are scheduled for completion in the relative near future. The Vietnam veterans mortality study will analyze the cause of death among Vietnam veterans since the conflict in an effort to determine if they have been subject to unusual patterns of illness as cause of death. This is in a Vietnam experience type of study and such is not limited to agent orange. The VA advises us that a final report is expected in July of 1984.

Additionally, the Veterans' Administration is developing the protocol for a very unique study known as the Twins Study. It will utilize approximately 450 to 500 identical twins, 1 of whom served in Vietnam and the other of whom did not.

Of considerable longer duration will be the massive Veterans' Administration congressionally mandated epidemiology study. The Veterans' Administration has advised the Agent Orange Working Group that a final review of the protocol is being completed by the National Academy of Sciences and requests for proposals to conduct the pilot phase are due to be sent out shortly.

Subsequently, a contract or contracts for the pilot study will be awarded. We have been advised by the Veterans' Administration that completion of the pilot study is anticipated by December 1984, with the projected completion of the bulk of the main study slated for the end of 1987.

The Army Agent Orange Task Force and the Science Panel of the Agent Orange Working Group are devising the means to provide appropriate individuals for use in this important research effort.

In summary, we are generally encouraged with the progress of substantive research which is going forward with the coordination and oversight of the Agent Orange Working Group. The prospects

for relatively near-future results in some areas are promising in four very major areas by mid- to late 1983, next year.

We will continue to avoid any prejudgment of the outcome of research. Our task is to provide the administration and the Congress with objective information upon which enlightened public policy decisions can be formed. That is the job assigned, and that is the job being performed.

Thank you, Mr. Chairman, and members of the subcommittee. We will be happy to respond to your questions.

[The prepared statement of Mr. Kull appears on p. 63.]

Mr. MONTGOMERY. Thank you, Mr. Kull.

You have given us some valuable information. I hope we can depend on this date of 1987 as a final study, a wrap-up on agent orange, and what effect it has had on the Vietnam-era veteran.

Is that what you are telling the subcommittee?

Mr. KULL. Yes, sir. That is the information that has been provided us for some time by the Veterans' Administration, 1987. We are holding to that date, in spite of the report to the contrary.

Mr. MONTGOMERY. We can pretty well wrap up the agent orange situation on this study, what effects it has had on the Vietnam veterans?

Mr. KULL. That is correct. I believe that is entirely feasible, and the science panel agrees.

Mr. MONTGOMERY. Mr. Kull, for the record, this Agent Orange Working Group, that works out of the White House, that is the coordinating group working with the Veterans' Administration and with Health and Human Services?

Mr. KULL. Yes, sir. The Agent Orange Working Group is a working group of the Cabinet Council on Human Resources and reports to Secretary Schweiker, who is the Chairman pro tempore of that Cabinet Council, and consists at this time of a number of Federal agencies that was expanded, incidentally, a year ago in July by President Reagan.

Prior to that time the major participants were the Veterans' Administration, the Department of Defense, and in the lead position HHS, with a number of other agencies participating as observers.

However, the decision was made by the President and implemented by Secretary Schweiker to expand that and make full participating members not only of those three agencies, but also Agriculture, State, Labor, Office of Management and Budget, Assistant to the President for Policy Development, the Chairman of the Economic Advisers, ACTION, EPA, and of course the Congressional Office of Technology Assessment.

Mr. MONTGOMERY. Well, that is good, but that gets it complicated, too. What we want to do is get some type of study that we can take a good hard look at and to decide where we go from there.

Do you coordinate and will you have the final say, Mr. Kull, or the Secretary of——

Mr. KULL. Yes, sir. We can coordinate and we can strongly recommend and oversee the various research activities that are underway in the Federal sector. Perhaps it would be accurate to say that we are not in the position of demanding or directing, but we can strongly recommend.

I can say this, that——

Mr. MONTGOMERY. Are you getting full cooperation from the key parties in this study?

Mr. KULL. I would say this, sir. When you want something very badly and you want it very quickly, there is always the perception that full cooperation is not as full as it could be nor as fast as you would like. That is true in this issue.

However, at this time, it is my perception that we are receiving the cooperation of all of the agencies involved in research under the aegis of the working group.

Mr. MONTGOMERY. Before I recognize Mr. Stump, I have been in government for a while now, and it gets bogged down and you frighten me a little with all the number of agencies involved in this agent orange study. They are going to run us all away if we don't come up with some type of report that makes sense and is logical to find out about this agent orange.

Certainly as chairman of this committee I will cooperate with you in any way possible because this is a burning issue and we have got to have some type of information to go on to see how we handle the number of bills that have been introduced pertaining to agent orange effects.

We will help you, and you have got a tough job, but I hope you don't expand it too much. We have got too many people involved in it.

Mr. KULL. There are some of the agencies that are not heavily involved in research; for example, the Department of Labor. Many of these people are involved in the policy aspects of it. We have a breakout where we have the science panel that is really a very strong working group that has direct oversight over those scientists that are involved and do present that information that we all seek.

Mr. MONTGOMERY. Thank you. I want to keep it within 5 minutes, so I will ask Mrs. Burnett to watch the light there. It should have been on there for me, also.

Mr. Stump?

Mr. STUMP. Thank you, Mr. Chairman.

Mr. Kull, it is inconceivable to me that we should be talking about 1987. Can you tell me very briefly why?

Mr. KULL. Well, I would like to be able to defer to the Veterans' Administration on the question. However, I am a layman, I am not a scientist, and since I have gotten into this I have found how complex these issues are.

Just, for instance, the epidemiology study, the main study, that is, could involve as many as 36,000 people. It is necessary, first of all, to identify who is exposed or highly exposed, who is not exposed, and determine whether or not a third cohort of people from other places, that served other places in the world, who they are, identify them, and then find them and then bring them in for one-on-one questionnaires, which are quite lengthy, as the Air Force study has exhibited with 1,200 Ranch-Hand personnel plus an equal number of controlled cohort.

We are talking about 36,000 for face-to-face interviews and questionnaires and the extensive physical examinations, 3 and 4 days per individual, that will have to be done, all of that fed into computers and analyzed. Those things, unfortunately, just simply seem to take a great deal of time.

Mr. STUMP. Thank you, Mr. Chairman.

Mr. MONTGOMERY. Mr. Edgar?

Mr. EDGAR. Thank you, Mr. Chairman.

In 1970–71 Senator Hart from Michigan started to look at the question of agent orange and other dioxins that have been used in our society. The private sector has been involved in the manufacture of these chemicals and they have been exposed to employees of those manufacturing facilities.

Other countries, industry, private sector have done studies with the exposure of dioxins to human bodies. Yet, we find ourselves in 1982 asking you the basic question, why is it taking so long to get information on this issue.

I understand your basic response is that, not being a scientist, the technical kind of thing takes time. But some of the answers ought not to take very much time at all.

In the course of my history on this committee we have heard over and over and over again how the Air Force was reluctant to go into its study, the VA was reluctant until we hit them over the head with a 2 by 4 to go into their study.

Finally, we have got some movement on those studies and yet we still hear it will take us another 5 or 6 years before we will have hard data to make any decisions of causality, the use of the defoliant and those who were in the service.

Can you understand why we have some great anxiety and frustration and suspicion about all of the studies that you have listed out because of this seemingly unending period of time that we have to wait?

Mr. KULL. Yes; I certainly can understand the frustrations that are being experienced by the Vietnam veterans. I can guarantee you there is a high level of sensitivity in the Agent Orange Working Group to resolve these questions as early as possible.

You made reference to some prior studies that have been ongoing, say, since 1971. I would like to defer——

Mr. EDGAR. Some have been ongoing since the early sixties, when the chemicals were being manufactured.

Mr. KULL. I would like to defer to Dr. Houk, the chairman of the science panel, to just visit with you about some of those studies and his information.

Dr. HOUK. Thank you, Mr. Kull.

I share, Mr. Edgar, your concerns very much. The studies have been going on since the sixties. Most of them do not answer the critical questions that need to be answered. There have been significant design problems in many studies in that many of the studies do not support the conclusion that was drawn from the study.

When the Agent Orange Working Group was reconstituted and the science panel reestablished, I was named the chairman of the science panel, and it seemed to me that we had an opportunity to have several studies available in late 1983 and this is what we have been pushing for—the Air Force ranch hand study, which was scheduled to come in in late 1983 and now may be a little bit earlier than that. The CDC birth defects study, was designed so it would come in in the same timeframe; the dioxin register of NIOSH is being handled to come into the same timeframe. Indeed, NIOSH has assigned and deployed to International Cancer Research to set

up a worldwide dioxin register to help add to the power of the one that is in this study.

There is a fourth study, and that is the VA proportionate mortality study. That study should be designed, in my opinion, and the VA knows that this is my opinion, to have that come in in the same timeframe, late 1983.

With these four well-done studies, it is likely or it is certainly possible that some specific information can be made available to the Government in order to answer some of these questions.

The long-range VA epidemiology study, a study of this magnitude—this is one of the few times it has ever been conceived of a study of this magnitude and complexity. It is going to take, just because of the mechanics of doing it, something in the order of 2½ to 3 years from the time it has begun.

We do not as yet have a protocol to begin that particular study.

Mr. EDGAR. Could you answer a question on that study specifically?

Why do we have to have a test study up to 1984 before we go into a real study?

Dr. HOUK. The pilot phase of that study is not a test study. What this is is taking a group of individuals who are going to be studied and refine the study intruments, the questionnaires, the laboratory tests, the standardization of information and that sort of thing.

The best way to say it is that during that phase you are refining your instruments so that you can go ahead and continue the overall study. This is rather standard epidemiologic technique in any of the relatively long-range epidemiologic studies that we do.

The difficulties there—and there has been a great perception of the difficulties of the cohort selection—as we testified to the Senate last year, we now believe that it is possible to develop a group of people who had significant exposure to agent orange and a comparable group who have not had for the use of this study.

We are working under the concept paper prepared by Dr. Bricker of DOD in December. The work continues on that. We are now trying to refine as much as we can—to fine tune as much as we can—so that when we select the individuals for participation in that study, that the statistical power will be significant enough so that the questions will be answered with a yes or a no and not a maybe.

That is the full purpose of trying to do this.

Mr. EDGAR. My time is up. Let me ask just one final question, if I may.

Mr. MONTGOMERY. Mr. Edgar, let me move on here, and then we will come back to you. I have to recognize these members on the subcommittee.

Mr. Mica?

Mr. MICA. Thank you, Mr. Chairman. I won't even take the 5 minutes. I will just make a statement here.

You say that studies have been going on since the 1960's. This is 1982. That is 22 years of studies, 46 Federal studies ongoing right now, and we are talking about 1987 to 1997, I saw 1 report the year 2000, before we can have any results on agent orange.

I can simply say this. As this Member of Congress, as far as I am concerned, we are not going to wait. The Congress won't wait, the

veterans won't wait, and they shouldn't have to wait 22 years. We are going to have to make some changes.

This committee will be pressed, and I think rightly so, and I hope to hell believe the charges some of my colleagues here, as soon as we get back here next year, to make some changes immediately based on the information that we have.

As far as I am concerned, my word to you is that you ought to take this information back to the VA, that we cannot wait, we will need as much information as we can get right now. Some veterans say it is well overdue, and I have to agree with them.

Thank you, Mr. Chairman.

Mr. MONTGOMERY. Mr. Sawyer?

Mr. SAWYER. Thank you, Mr. Chairman.

Being a lawyer, I get upset with some of the statements—and I have read all the statements on the testimony today—to the effect that there is no proof that this dioxin or agent orange didn't cause all these problems and therefore they should be compensated.

On the other hand, I cannot understand why it takes so long to get off the ground on getting something factual on the thing so that we can approach it on some intelligent basis.

I know it was quite a while ago we approved the so-called Ranch Hand study, which was going to, as I understood it at that point, to solve this morass of not being able from the records to determine who had been exposed or what had been their extent of exposure.

Here, as I understood it, was a relatively small group, 1,100 to 1,200 people, who had been highly exposed in a very concentrated way, their addresses were known, and their survivors were locatable.

For the life of me I can't understand why we can't just get about this. We already have a known, defined group. We can talk about pilot studies and redoing protocols and passing protocols back and forth from UCLA to the administration and back to some contractors, but I have to say that I agree with the gentleman from Florida that I am kind of running out of patience on this, too.

It is not going to do much good if we make some determination in the year 2000 that agent orange in fact did cause all kinds of difficulties. It just seems to me that this is important enough in its potential if in fact agent orange has been a cause of all these problems, but of course we don't know that at this point.

It seems to me important enough that we proceed and come to a conclusion. I am perfectly willing, if we can get any facts, to make whatever hard decisions either way that we have to make. But it seems to me that we are entitled—and so are certainly the veterans with the problems who feel that they have problems attributable to agent orange—are entitled to some expedition of this thing. We ought to get going.

Thank you, Mr. Chairman. That is all.

Mr. MONTGOMERY. Thank you, Mr. Sawyer.

Mr. Daschle?

Mr. DASCHLE. Thank you, Mr. Chairman.

I want to especially welcome Bart, as a long-time resident of South Dakota, I want all the committee members to know, that he was a highly respected newsman out there for many years.

I think the one thing that we can see from the statements given to the committee today is that this committee is wearing thin on patience. I think it is understandable. These veterans aren't going to need agent orange help when we finally figure out what the problem is. They are going to need gerontology assistance.

That is the problem we are facing. I mean 20 years—1988 is going to be 20 years beyond that time when most of those veterans probably left Vietnam. I think the chairman was right. There are too many people here dealing with this issue and trying to make decisions. We have 20 cooks and 1 stove and everyone is hovering over that stove trying to make decisions.

I think the real thing that is coming out here is that we are dividing and conquering. We are dividing this issue among so many people, and the essence of what you are doing is conquering those of us who would like to move quickly, and directly and emphatically to resolve this issue.

I have a number of questions I would like to direct to Dr. Houk.

Are you aware of the new criteria the VA is seeking to include in the exposure index, Dr. Houk?

Dr. HOUK. Yes.

Mr. DASCHLE. Well, considering the fact that the exposure index was agreed to in March, do you feel that without these inclusions the results of the study would not be valid?

Dr. HOUK. Let me answer that a little differently——

Mr. DASCHLE. As concisely as you can. I have a number of questions.

Dr. HOUK. We are working under a concept, we are trying to hone that down as much as we can to have a yes or a no. We have a subgroup which is working very hard on this issue in trying to do that.

Mr. DASCHLE. Well, why all this now? Why after unanimously agreeing to the exposure index in March are you coming in with all this now?

Dr. HOUK. It is not a unanimously agreed exposure index. The concept of how to develop this was agreed upon, and we are trying to fine tune this. I think Dr. Bricker at DOD and those will agree with this and get it out.

The critical part of this study right now is the design of the study.

Mr. DASCHLE. Well, I have a paper that says the panel unanimously agrees that the Department of Defense should select the cohorts in accordance with Dr. Bricker's cohort selection paper, tab A, and that is dated March. Now in July the VA comes back and says that isn't good enough, we want to change it, and now you are saying well, maybe we should change it.

Is that what you are saying?

Dr. HOUK. What I am saying is that they are proceeding in trying to refine, to fine tune this as much as is possible. That is not delaying the study. What the delay is is that we do not as yet have a protocol, that it has not finally been determined what are the end points, how are those going to be measured——

Mr. DASCHLE. Why don't we have a protocol after all this time?

Dr. HOUK. Well, that other——

Mr. DASCHLE. No; why in your opinion don't we? Who is deliberately dragging their feet? Who is saying no to all this back there? Who in the inner sanctums of all these agencies and all these cooks are saying hey, let's just ignore this thing?

Dr. HOUK. If I were to be responsible for the development of this protocol, I would get a group of people—epidemiologists, laboratory people, the necessary one from within our own shop, and outside help if we had to have it if we didn't have the necessary expertise—put them in a room and tell them not to come out until they had one done and that would take, in my estimation, maybe a couple of weeks.

Mr. DASCHLE. Mr. Chairman, I would like to move that we put Dr. Houk in charge of this whole operation.

Mr. MICA. We will volunteer the room, also.

Dr. HOUK. Thank you but no thank you.

Mr. DASCHLE. Let me ask you this. Have you ever offered the services of an epidemiologist under the jurisdiction of HHS to the VA?

Dr. HOUK. We made a recommendation that the VA talk to CDC and try to work out arrangements where a CDC epidemiologist could work with the VA and use the epidemiologic technique and expertise of the entire center on this.

Mr. DASCHLE. So you have offered the VA that service. Why have they turned you down?

Dr. HOUK. I don't know. I don't know that they have turned us down.

Mr. DASCHLE. Well, they don't have any epidemiologist over there, so I assume that they have turned you down. You don't have a reason? We will sure find out.

Considering the science panel and OTA has already endorsed the protocol, do you think it was necessary for yet another review by the National Academy of Sciences?

Dr. HOUK. The science panel has not endorsed the protocol. There is no protocol. We have some documentation of two instances coming from UCLA, both of which were unacceptable.

Mr. DASCHLE. I see my time is up. Thank you, Mr. Chairman.

Mr. MONTGOMERY. The problem is we have a number of witnesses and we have five votes that will probably come up about 10:30. I want to advise the members and our witnesses, who also have important schedules, of my plans for the remainder of the morning. What I would like to do is when we begin these votes is recess for an hour and then come back and go for as long as we can, up until 12:30 or so. We then might have to adjourn or recess and set another date to hear the remaining witnesses. I think if we push along here we can get a number of the witnesses, including the Veterans' Administration.

The Chair is going to recognize Mr. Dorgan, and then I will come back and recognize you, Mr. Edgar.

Mr. DORGAN. Thank you, Mr. Chairman. I won't take my full 5 minutes.

I was disturbed by the answer, Mr. Houk, that you gave to Congressman Daschle's question—not disturbed with you but disturbed by the answer—about the offering of assistance by HHS to the VA and apparently no acceptance of that offer.

It seems to me, once again, that this is kind of bureaucratic paralysis that we keep seeing in the pursuit of some answers on these kinds of difficult questions. The last thing these veterans need is to see that kind of bureaucratic paralysis impeding progress on some very important issues to them.

Let me just tell you that there was a young fellow at a hearing on agent orange recently that is a good example of, I think, the attitude out there.

He told us that he had a degenerative muscular disease that he didn't quite understand—some thought it was MS, some didn't, but at any rate it was a degenerative muscular disease—has two children, both with birth defects, and now has just discovered he has a brain tumor. His point was, he said, I am not complaining, I just want to know, isn't part of that as a result of my exposure to agent orange.

It is quite amazing that here is a young veteran who has a very difficult life ahead of him and he is not complaining, he just wants some answers. What you are saying in response to Congressman Daschle's question is that there is some bureaucratic bungling going on here that is impeding the pursuit of meaningful answers for that young fellow.

There are a lot of people like him around the country. Those in this Congress who believe this country should build its defenses are doing a real disservice if they don't at the same time pursue very vigorously answers to questions like these, because if you don't treat veterans properly, you are not going to have a good defense of this country.

This is one of the most important questions facing those veterans who served our country in Vietnam and who were exposed to agent orange and other dioxins.

I just want to reiterate the kinds of things other members of the panel have said. I just think we have to pursue answers to these questions with the utmost urgency for the benefit of the veterans, like this young man named Tony that I described. There are literally hundreds of thousands of young men like him who are concerned and who are asking these kinds of questions about their future.

I give back the balance of my time, Mr. Chairman.

Dr. HOUK. May I respond briefly that the assignment of an epidemiologist from CDC to the Veterans' Administration is not the only way to solve this problem. It just seemed to me that that was one way. Obviously there are other epidemiologists that can be hired. I was trying to expedite that whole issue.

As far as too many people being in the soup, we recognize that very much. The way the science panel works is that we operate in groups of subcommittees, that we only have two or three people who have a major expertise in that area to wrestle with that particular issue so we don't have too many people in the soup and spoil it.

Mr. DORGAN. I understand your point. My only point was that there are people who are often more concerned about turf than they are about getting at answers. Let me just say that Congressman Daschle has been one of the most tenacious Members of the

Congress in recent years in trying to push toward a conclusion on this kind of issue, and I appreciate his line of questioning.

Mr. MONTGOMERY. Mr. Edgar?

Mr. EDGAR. Thank you, Mr. Chairman.

I would like to play out a scenario and then ask you a specific question.

Suppose all of us sitting here get reelected on November 2 and we come back in January and get sworn into office, call together a meeting of the Veterans' Affairs Committee, at which time we ask the Budget Committee to put in the 1984 budget the amount of money necessary, if in fact we determined automatically that there was causality between the use of the defoliant in Vietnam and exposure to that defoliant because of service, then we move to pass authorizing legislation and appropriating legislation so that on October 1 a year from now we will have signed into law the funds available, the authorization available, to presume causality between the use of the defoliant and exposure to that defoliant in the theater of Vietnam.

Could you have or would you have enough information from the early studies that will be ending up at that period of time, plus enough information from the studies that you have done and looked at since 1960, and the information that we know about exposure to dioxin and its causing of systemic diseases to recommend to the President that it is a good policy of the United States to consider the reaction to that dioxin as a war-related cause, then leading to compensation, until proven otherwise.

Would you, do you think, have enough information to make a recommendation to the President at that time?

Mr. KULL. I would like to preface my answer by saying that there are two distinct functions involved here.

One is that of the Agent Orange Working Group and the contributing scientists, whose charter and charge is research and to provide the policymakers with what is in their judgment a sufficient amount of information to make enlightened public policy.

It would be inappropriate for persons in my position and those of the Agent Orange Working Group to even comment, I think, on the propriety of the development of public policy. That is a responsibility of the administration and the Congress.

Mr. EDGAR. I understand that from your perspective, but is it not true that you are working as a working group to the President, and if Congress were to pass such legislation over the President's objections or over your objections, clearly you would have to make recommendations to the President as to how to proceed.

Mr. KULL. It is within the realm of possibility, feasibility, whatever, that by the end of 1983, the middle to the end of 1983, four studies—the mortality study, the CDC study, the Ranch Hand study and the dioxin registry—will have at least preliminary, fairly solid results coming forth.

It may be the judgment of the administration and Congress that this could be sufficient information to use to move forward with legislation relating to compensation. That would be at that time the judgment of the Congress.

I think for me to say any more, to go any further, would be inappropriate because it would be getting into a policy area. I don't think it is proper that we should be in that area.

Mr. EDGAR. Thank you, Mr. Chairman.

Mr. STUMP [presiding]. Mr. Daschle?

Mr. DASCHLE. Mr. Chairman, I just want to follow up on one last question. I ran out of time.

I would like to ask Dr. Houk, we approved the protocol, the design on the study, last March, for the big study. Do I understand you right to say now that we have to have a new protocol, a new design for the pilot study? You aren't saying that in light of what you said about locking everybody up in a room and getting this thing approved.

Dr. HOUK. Let me empahsize, Mr. Daschle, in my opinion we do not have nor have we ever had a protocol. The science panel has never approved a protocol. We approved the concept of that, but there was enough information that the design of a pilot study should proceed rapidly.

Mr. DASCHLE. I have a release dated March 26 saying a proposed design for research study "has been approved by a science panel of the White House Agent Orange Working Group." It just says it flat out. It doesn't say we are thinking about it, it doesn't say we have got the blueprint, it says we have got the design. Now you are telling me that that is null and void, inoperative, or what?

Dr. HOUK. The science panel concluded its review of the latest version of the VA epidemiology study protocol that was dated April 28, 1982, and that was transmitted to the Veterans' Administration from the science panel on June 25, 1982.

I can submit that, if you wish, for the record.

Mr. DASCHLE. You can submit it, if you wish, but I don't think it means a thing. It is meaningless. What you are telling me is that you are retracting the statement put out by HHS on March 26 saying, "A proposed design for a research study * * * has been approved." Now you are saying forget that, that doesn't mean anything.

That is what I am talking about when we talk about getting this thing completed and getting something in black and white. You know, we get things in black and white and they become gray a week later. I just think that it is ridiculous.

That is the only point I wish to make. I yield back the balance of my time, Mr. Chairman.

Mr. STUMP. Mr. Mica?

Mr. MICA. I would just like to follow up on one of your answers, Dr. Houk.

Do you really think it is possible to take a group of experts and put them in a room—I don't mean literally, but get some people together who could make some decisions, if they were told they had to make the decision?

Dr. HOUK. We deal with these issues in my Center for Environmental Health all the time, issues maybe not quite as tough as this, but almost. This is precisely how we do it. We set up what our goal is, what we want to look at, our input, and then we get a group of people together, both from within our staff and outside of

our staff, if we need that expertise, and write the protocol and then have it peer reviewed to bring the refinements as much as possible.

This is the way that we work.

Mr. MICA. What you are saying is that in normal research medical practice this is done all the time, decisions are made, protocols are set forth, but in this case we are just simply not doing it. Is that correct?

Dr. HOUK. This is the way that it is usually done, yes, sir, the way that I described.

Mr. MICA. I am glad that we have this on the record because here we have someone with some, what we expect, credibility, background and knowledge in an issue that we are trying to resolve and we are being told here very directly that it can be solved very quickly, maybe not the way the studies would have them solved if they continued for another 20 years, but under normal medical protocols, under procedures established in the scientific and research community, and we are just not doing it.

That may leave a broader opening for this committee to just simply require that it be done by a certain date.

Thank you, Mr. Chairman.

Mr. STUMP. Any questions, Mr. McEwen?

Mr. MCEWEN. No questions, Mr. Chairman.

Mr. STUMP. Mr. Dorgan?

Mr. DORGAN. Just one final question.

You say that there are a number of applications like this, searching for answers—it is a very complicated area—in which you have been involved. In your judgment, has the VA been aggressive in trying to organize the effort to solve this problem? How would you characterize the VA's behavior?

Dr. HOUK. Possibly that they haven't had to deal with these issues as severely in the past. I think in the first year of the operation of the Agent Orange Working Group, there was a great deal of effort and activity going on at the Veterans' Administration to try to help resolve the various issues.

An issue that I keep coming back to—and I do with my colleagues at the VA, also—is the mortality study. I find that that is going to be a critical piece in answering this issue.

From the time that we started talking about it, it was certainly possible, and even now it is possible, to have that study come out in the timeframe of late 1983 and to complement all the other things that are coming out at the same time.

This is why that timetable was designed. Let me give you an example, if I may.

It appeared to me that the CDC birth defects study was falling a little bit behind in our timetable. That study is funded by us, the VA and DOD. We put in more of our own resources to insure that we did not fall behind the late 1983 timeframe that we are talking about.

This is the sort of thing that I think if we are committed to answer this question, we can answer the question. We must recognize that the overall, long-term, congressionally mandated study that the VA is going to do is going to take about 3 years to do, once it gets going.

We were hoping that some of these other ones that were coming off early would provide some interim answers. Indeed it may be possible that there are interim answers in this upon which policy can be based.

Mr. DORGAN. What I was trying to get at is do you perceive working with the VA on this, do you perceive that this is a real front-burner issue with the VA? Do you have any criticism of the way the VA has approached it? Do you see that this is one of those issues on behalf of veterans that are affected that the VA is rushing to try and deal with?

Dr. HOUK. I think the Veterans' Administration must make their own priorities within their own amount of resources that they have. I can assure you that the science panel and myself have been pushing as hard as we can to try to make sure that this does receive sufficient priority to get answered because I think that the country deserves an answer on this.

As was mentioned here, studies have been going on since about the early sixties on dioxins. Most of them are not well designed, not large enough to answer the overall question that needs to be answered. We can answer some of the questions, but not many.

Mr. DORGAN. Have you had training in diplomacy?

Just honestly, do you see any cause to be alarmed? Is there foot-dragging going on? Are you perfectly satisfied with the way the VA, which would be the lead agency here, is pursuing this issue?

Dr. HOUK. If I were directing the study, or the studies, I would have proceeded more rapidly, if I had had the appropriate resources. I can't answer your question directly because I don't know the resource structure of the VA and what they have available to put in it.

Mr. DORGAN. Thank you, Mr. Chairman.

Mr. STUMP. Gentlemen, we are going to have to move on. If there are other questions, we can submit them to you, if you would answer them. They would be made a part of the record.

Thank you very much for your testimony.

Mr. KULL. Thank you very much, Mr. Chairman, and members of the committee.

Mr. STUMP. Our next witness will be Major General Chesney, Deputy Surgeon General, Department of the Air Force.

General, your statement will be made a part of the record in full, and if you would care to summarize, we would appreciate it.[1]

STATEMENT OF MAJ. GEN. MURPHY A. CHESNEY, DEPUTY SURGEON GENERAL, DEPARTMENT OF THE AIR FORCE, ACCOMPANIED BY LT. COL. PHILLIP G. BROWN, ASSISTANT FOR BIOCHEMICAL ENGINEERING, AND PAT BRAGG, ASSISTANT FOR CONGRESSIONAL AND PUBLIC AFFAIRS, DEPARTMENT OF THE AIR FORCE

General CHESNEY. I will summarize, Mr. Chairman.

Thank you very much for being allowed to speak to your committee today and the opportunity to present an update on the progress

[1] See p. 71.

of the Air Force epidemiological study of its Ranch Hands personnel who were exposed to herbicides in Vietnam.

Lt. Gen. Paul Myers presented a status report of this study on November 18, 1981, before this committee. I would like to bring you up to date as to where we are. I do have some news.

The initial mortality phase of the study is nearing completion at this time. As of December 31, 1981, we had 60 Ranch Hand deaths with full documentation for each of those 60 deaths: 22 were killed in action; 18 accidental deaths; 3 suicides; 1 homicide; 2 malignant neoplasms; I endocrine, nutritional, metabolic and immunity disorder; 9 diseases of the circulatory system; and 4 diseases of the digestive tract. We have learned this year of seven more deaths for which we are in the process of obtaining additional information.

Data collection for this study continues on a daily basis. Although more extensive analyses and comparisons remain to be done, preliminary findings indicate that the overall crude mortality of the Ranch Hand and comparison groups have been very similar.

Based on the 60 deaths identified, excluding 22 killed in action, there is no statistically significant difference in the total death rates between the Ranch Handers and the comparison group.

Both groups appear to have experienced significantly less mortality than a similarly aged U.S. white male population. This indicates what we call the healthy worker effect. However, thus far very few deaths have occurred in the study group, and these deaths represent only a very early assessment of mortality.

The only preliminary interpretation that can be made from this data so far is that the Ranch Hands have a similar death rate when compared to an equivalent group. Periodic reassessments of the mortality experience of the group will be made.

Definitive conclusions must await the completion of the more detailed analyses and the accumulation of a larger number of deaths in the study groups in the coming years.

On September 18, 1981, Louis Harris & Associates were awarded a contract to administer face-to-face, in-home questionnaires to the participants selected for this phase of the study.

Of the 2,486 subjects selected for the study, only 1 Ranch Hand and 4 comparison subjects could not be located. This location rate of 99.8 percent is very high for an epidemiological study.

Interviews were also planned with the current and former wives of the subjects and the next of kin of deceased individuals. These interviews began in October 1981 and are still in progress. As of September 1, 1982, 2,334 study subjects, 2,700 current and former spouses, and 75 next of kin interviews have been accomplished.

The participation has been gratifying. Ninety-seven percent of the Ranch Hand subjects have chosen to participate in the questionnaire. Only 3 percent, 38 subjects, have declined to participate.

As expected, comparison subjects have participated at a slightly lower rate, with 92 percent of the original selected comparision subjects completing the questionnaire phase of the study. Eighty of the originally selected comparision subjects declined and 15 are still to be administered the questionnaire.

The Louis Harris contract has been extended until November 15 of this year to provide the questionnaire data on any comparison subjects who make late decisions to participate.

All comparison subjects declining the questionnaire and/or the examination have been or will be replaced with willing subjects equally well qualified for inclusion in the study. The substitute subjects will all be interviewed and examined in the same manner as the other participants.

The examination phase of the study is proceeding well. On November 25, 1981, the Kelsey-Seybold Clinic in Houston, Tex., was awarded the contract to conduct indepth physical examinations and psychological evaluations of the participants. Examinations began on January 12, 1982. As of September 1 of this year, 1,645 examinations have been completed on 858 Ranch Hands, 757 primary comparisons, and 30 replacement subjects.

There are an estimated 680 examinations yet to be accomplished; 66 Ranch Hands declined to participate in the examination. There are still 235 Ranch Hands who are either scheduled or who have not made a decision. Of the original comparison group, 61 percent (757) have completed the physical examination, and an additional 129 have declined; 262 still remain to be scheduled.

The physical examination contract is being negotiated to terminate on or before December 15 in order to accommodate all of the individuals desiring to participate.

One problem due to a computer programing error has arisen since last November and has been successfully resolved. Eighteen percent of the comparison subjects initially selected from computer personnel records for the questionnaire and examination phases of the study were found to be inappropriate for inclusion in the effort.

All of these individuals were advised of this error and thanked for their assistance, and other more appropriate subjects were entered into the study in their place. This overselection did not affect the scientific validity of the study.

The contracts should be concluded late this fall and an interim technical report will be issued early in 1983, as promised to Congress last November. A mortality study will be released in March, and preliminary reports on the data from the questionnaire and examination phases of the study will be available in the April to June timeframe of next year.

In summary, the study is proceeding only slightly behind schedule. The reason for that is good participation that we did not expect.

We will continue to work closely with this committee and other interested groups involved in the resolution of the herbicide issue. I will be pleased to answer any questions at this time.

[The prepared statement of General Chesney appears on p. 71.]

Mr. STUMP. General, did you say that the Ranch Hand group received more exposure to agent orange than the normal soldier who served in Vietnam?

General CHESNEY. We have estimated that they received maybe 1,000 times more exposure than the average soldier in Vietnam.

Mr. STUMP. Are you at the same time saying that the mortality rate among those at least on a preliminary study appears to be no greater than those who were not so exposed?

General CHESNEY. Initially, yes, sir. The death rate until the first of this year is the same as the comparison group who flew a similar aircraft either in or out of Vietnam who had no more exposure than the average soldier did to herbicide orange. It is a different aircraft, they carried no spray, and so forth.

We have also compared it to the U.S. white male public, and the death rate is approximately half that of the white male public of the similar age group.

Mr. STUMP. Mr. Daschle?

Mr. DASCHLE. Thank you, Mr. Chairman.

I have always looked upon that in a little different perspective. It is like the man holding the hammer. If you are holding it, it feels fine. If you get hit with it, it hurts quite a bit. I am not so sure we are talking about those who held the hammer or those who were hit by the hammer when we talk about the pilot of the plane that sprayed this dioxin.

General Chesney, I want, first of all, to commend you for your expeditiousness in the way I think you are progressing with your study. Let me ask you this.

Though you state your mortality data is not significantly different statistically, the impression I get from what you are saying in your statement is that you haven't determined whether there is any statistical significance with respect to the specific causes of death. Is that correct?

General CHESNEY. We have not gone into the total causes of death, but we will report that out very quickly.

Mr. DASCHLE. Let me reiterate. You have not determined the statistical significance with respect to the specific causes of death. Is that correct?

General CHESNEY. Not that we are ready to report yet.

Mr. DASCHLE. That is the important point I think in your testimony. I thank you for your answer.

Mr. STUMP. Mr. McEwen?

Mr. MCEWEN. Thank you, Mr. Chairman.

General, what is the name for agent orange: Is this 2,4-D and 2,4,5-T—all of that is under the generic term of agent orange; is that correct?

General CHESNEY. Yes, it is an equal mixture of 2,4-D and 2,4,5-T.

Mr. MCEWEN. Now, under commercial usage, is that diluted to any significant degree?

General CHESNEY. Well, the 2,4,5-T now has limited use commercially. The 2,4-D, if used—and it is used commercially now—is diluted. We had an equal parts mixture, which was liquid. We didn't have to mix it with anything. All we did was put it in the aircraft and spray it out.

Mr. MCEWEN. What is the dilution ratio commercially?

General CHESNEY. We will take that for the record and get that for you.

[The following was subsequently supplied for the record:]

General CHESNEY. I do not know what commercially available 2,4-D and 2,4,5-T mixtures are found in the United States. Perhaps the Environmental Protection Agency could provide this information. However, I can provide some insight on the types of materials that were available through the General Services Administration during the period 1965–1974. Any federal agency could have ordered from various

vendors a variety of herbicides including 2,4-D, 2,4,5-T and their mixtures. These herbicides contained anywhere from 2 to 6 pounds of equivalent acid per gallon. For example, 2,4-D and 2,4,5-T mixtures in 1967-68 were available over a range 2 to 4 pounds of ingredient per gallon. In this situation, the herbicide was provided as an emulsifiable concentrate suitable for mixture with water at a ratio of 3 parts H_2O to 1 part chemical. All herbicides were subject to use requirements imposed by the USDA or subsequently by EPA.

Mr. MCEWEN. Would an estimate of about 10 to 1 be in the ballpark?

General CHESNEY. I just haven't looked on a bag lately, sir, so I don't know.

Mr. MCEWEN. To your knowledge, was this herbicide used straight in Vietnam? Was it undiluted?

General CHESNEY. Undiluted, straight out, 100 percent concentration, yes, sir.

Mr. MCEWEN. Thank you, Mr. Chairman.

Mr. STUMP. Other questions?

General, thank you. There may be other questions from other members not present. If you would answer them for the record, they will be shown.

General CHESNEY. All right. Thank you, Mr. Congressman.

Mr. STUMP. Thank you, sir.

Our next witness will be Mr. Richard Christian, Chief of the Army Agent Orange Task Force, Department of the Army.

STATEMENT OF RICHARD CHRISTIAN, CHIEF, ARMY AGENT ORANGE TASK FORCE, DEPARTMENT OF THE ARMY, ACCOMPANIED BY CAPT. PETER A. FLYNN, DIRECTOR FOR PROFESSIONAL SERVICES, AND DR. JEROME G. BRICKER, SPECIAL ASSISTANT FOR HEALTH LEGISLATION, OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS

Mr. CHRISTIAN. Mr. Chairman, members of the subcommittee, I am Dick Christian, Chief of the Army Agent Orange Task Force. With me today is Capt. Peter Flynn and Dr. Jerome Bricker, Office of the Assistant Secretary of Defense for Health Affairs.

The Army Agent Orange Task Force was established on May 21, 1980. On April 26, 1982, Secretary Weinberger directed the Army to become the lead DOD agency for the purpose of providing the Veterans' Administration with the necessary cohort selection list and other data.

I wish to thank the subcommittee for providing us with an opportunity to describe the progress that we have made in retrieving the records relating to agent orange during the past year.

We have substantially expanded our agent orange activities. As a result of this expansion, we believe that the Army Agent Orange Task Force is ready to respond promptly and effectively to research demands and proceed as soon as the necessary decisions have been made by other agencies about the proper scope and character of the health studies into the possible effects of agent orange.

Before describing the enhancements we have made on the agent orange records, I would like to say a few words about the Vietnam war collection.

This collection contains almost 40,000 linear feet of combat records. On the one hand, the vast bulk of these records makes it dif-

ficult and expensive to research their contents. On the other hand, the richness of this collection also makes it possible to undertake studies of the movement of combat battalions in areas where agent orange may have been sprayed.

However, it is important to remember that the collection consists of combat records, and they are not always complete. This limitation has to be considered when planning health-related studies on the possible effects of agent orange.

The task force has frequently briefed health researchers concerning the strengths and limitations of our records collection. It is also important to remember that the collection consists of military records, many of which are impacted by security classification and Privacy Act matters.

In addition, because these are military records, it is frequently difficult for personnel not familiar with the military to work with them directly. To the uninitiated, the terminology is strange and unit relationships are sometimes unclear.

The task force is fortunate in having many former military personnel, including Vietnam veterans, assigned to it. We believe that their knowledge of military operations and of Vietnam itself can be of substantial assistance to health science researchers who make use of the Vietnam war collection.

Here are some of the steps taken in the past year by the task force to facilitate access to records and to support ongoing scientific research:

The staff of the task force has a trained nucleus of 11 full-time researchers.

We have developed and implemented a computerized system for indexing agent orange documents to facilitate retrieval of key records. We now have over 5,000 agent orange records indexed.

We have taken steps to establish closer liaison with the Departments of the Navy and the Air Force. As a result, officers from the Navy, Marine Corps, and Air Force have now joined the Army Agent Orange Task Force.

The task force has drawn up detailed plans for the data retrieval activities that will be required as soon as responsible agencies decide on the required characteristics of the study cohorts to be used in studies of the possible long-term effects of agent orange.

These plans, which take the form of milestone timetables, outline each of the steps necessary to locate exposed and nonexposed cohorts and to retrieve the relevant personnel records.

The basis for the general research plan is the DOD Exposure Index Model designed by Dr. Bricker and submitted to the Science Panel of the White House Agent Orange Working Group on December 4, 1981. The DOD model was subsequently reviewed on December 14, 1981, and January 27, 1982, and was unanimously agreed to by the Science Panel of the Working Group.

It was determined that DOD should select the cohorts in accordance with Dr. Bricker's cohort selection model. This model was developed as a result of prior ground troop studies and records research conducted by the task force, which substantiated its feasibility. Subsequent computer analysis proved that the procedures contained in the model were workable and would produce the expected cohorts.

Briefly, the DOD model is a methodology to identify cohorts for the pending pilot and full epidemiology studies. The selection and records processing of 1,800 veterans for the pilot study will require 6 months.

After completion of the DOD input to the pilot study, we believe that it is possible to select the cohorts for the full study in about 1 year to 18 months. The DOD input to the full study as envisioned will identify 36,000 veterans who will be divided into 3 cohorts of 12,000 each.

The first category of approximately 12,000 veterans would constitute a troop population heavily exposed to herbicides while serving in Vietnam. The second category, also of 12,000 veterans, would serve as the nonexposed herbicide group of Vietnam troop population. The third category of 12,000 would be Vietnam-era veterans who did not serve in Vietnam.

The steps in the DOD Exposure Index Model will provide a list of veterans who can be recruited for the pilot study. The same methodology will be used for the full study.

The task force has conducted some preliminary cohort selection activities in connection with the pilot study. The basis for beginning this effort was contained in a letter from the Chair, Pro-Tem, Cabinet Council on Human Resources to DOD on April 8, 1982.

This letter recommended that the DOD begin the records search necessary to provide the VA with subjects for the initial pilot study.

The net result is that the task force is ready to move rapidly as soon as final decisions are made by other agencies regarding the type of studies that are most suitable in the circumstances.

Mr. Chairman, this completes my statement. I will be happy to answer any questions that you may have.

[The prepared statement of Mr. Christian appears on p. 73.]

Mr. MONTGOMERY. Thank you, Mr. Christian.

Mr. Stump.

Mr. STUMP. Mr. Christian, if I understood you correctly, the task force developed an exposure model index which appears to be substantially more effective in identifying the individual veteran who may have been exposed to agent orange than originally estimated.

What is your personal confidence factor in the model's capability to identify individually exposed personnel?

Mr. CHRISTIAN. First of all, we have always recognized that we would have to examine the military records of about 50 combat battalions in order to obtain the cohorts for 10 combat battalions. We have complete confidence that we can furnish the required figures to the VA.

Mr. STUMP. Thank you.

Thank you, Mr. Chairman.

Mr. MONTGOMERY. Mr. McEwen.

Mr. MCEWEN. Thank you, Mr. Chairman.

I would like to know whether or not the use of agent orange was discontinued in Vietnam prior to the end of the war?

Mr. CHRISTIAN. Dr. Bricker.

Dr. BRICKER. Yes, sir. It was completely eliminated in April 1969 when the first studies on the biomedical research results came out.

There was a date difference April 1970. All fixed-wing herbicide operations were ceased.

Mr. MCEWEN. Do you have any background as to why that decision was made?

Dr. BRICKER. Because of the concern of affecting personnel. I, myself, was involved with the biological chemical warfare program in 1963 and 1966 in the Air Force. I am a retired Air Force officer. As I have stated to the Veterans of Foreign Wars, I believe I was certainly inside the program. We did not know of dioxin at that time. I never heard of dioxin until I became involved in the program again in 1980.

Mr. MCEWEN. Were any of you gentleman exposed to agent orange during your service?

Dr. BRICKER. Dick served three tours in Vietnam, sir. I, myself, was down on Range 52-A at Eglin Air Force Base in 1963 and 1966.

Captain FLYNN. No.

Mr. MCEWEN. Your answer I presume is yes; is that correct, Mr. Christian?

Mr. CHRISTIAN. Yes, sir. Most probably, I was exposed to Agent Orange on a tour in the spring at Long Binh, South Vietnam.

Mr. MONTGOMERY. Would the gentleman yield?

Mr. MCEWEN. Yes.

Mr. MONTGOMERY. I was over there eight times. I have a little exposure, too. So if you come up with a little concrete information, we are ready for it.

Mr. MCEWEN. Mr. Christian, from your testimony, it appears to me that most of the progress that has been made in these studies has been made in the last several months. Is that a correct assumption for me to make?

Mr. CHRISTIAN. Much progress has been made in the last several months. I must say that, from the beginning when the Agent Orange Task Force was formed with three personnel, we have progressed to a point where we are completely confident that we can find the cohorts to be used in this study.

Mr. MCEWEN. The question was posed to an earlier panel as to whether or not this study is on the front burner in the concerns of the Veterans' Administration, that it is difficult to elicit a direct response to that question. I wonder if you could give us a more definitive answer.

Mr. CHRISTIAN. As far as the Department of the Army is concerned, agent orange has top priority. I have been able to obtain the required personnel resources and funding for equipment automation. I am completely confident that I have the entire Army Staff behind my project. But I cannot speak for the Veterans' Administration.

Mr. MCEWEN. I think we have a very serious issue here, and I would hate to see it bogged down with any political attacks. Earlier there was a significant degree of criticism as to whether or not there was ample consideration given this issue, and I appreciate your response.

I have one final question. Dr. Bricker, I had a taxpayer from southern Ohio in my office a couple of weeks ago where he just laid out the situation as having been in Vietnam for some time and exposed to agent orange for some time. His doctor described his con-

dition as the interworkings of an electrical network, and that is when the wires just start to miss a little bit. He has severe numbness in his extremities, and it is progressing. He is a farmer and, some days earlier, he had leaned up against a fan belt and it had gone significantly through his skin. It wasn't until he smelled it that he looked down and saw that it had ripped half his hand apart. Sometimes he has feelings, other times he has numbness. Of course, the analogy was made of a bug that dies when you put a pesticide on it and it dies from the outside in.

Is it fair to draw correlations repeatedly, examples like that into this situation, the use of agent orange? Do other people feel that the only damage that comes from this is psychological or some sort of skin rash?

Dr. BRICKER. No, sir, I am not a physician; I am a physiologist. There is a difference. Dr. Flynn is our physician here.

Captain FLYNN. The temptation is great to draw conclusions from single cases. The problem, of course, and the one that has been posed to the science community here, is to try to define cause and effect. Obviously, in this individual you have an observed effect. Something is wrong with the man. The question is, of course, what has caused these kinds of conditions. They can arise from a multitude of causes. The question that has been posed and for which an answer is being sought is: Is agent orange or dioxin one of the causative agents that can cause a condition like this to arise?

Mr. MCEWEN. You have restated the question, and you are not ready to come to a conclusion, I guess.

Mr. MONTGOMERY. The gentleman's time is up.

Dr. Bricker.

Dr. BRICKER. Thank you, sir. I do have the exact dates. I am sorry for fumbling.

All fixed-wing operations for agent orange were terminated on 15 April 1970. The last fixed-wing Ranch Hand aircraft was flown on the 16th of April 1970, and that was because of the International Date Line. Prior to that—and that is why I was saying 1969—29 October 1969, agent orange was restricted to enemy-controlled and very isolated areas. Finally, the last helicopter spray mission concerned with agent orange was completed on 9 June 1970. All Blue and White herbicide fixed-wing missions were suspended on the 31st of October, 1971, sir. That is the whole chronology.

Mr. MONTGOMERY. We have about 3 or 4 minutes left before we have to go to vote. The Chair will recess the hearing for 1 hour for these five votes, plus this vote on the approval of the Journal, which we didn't need. I believe we will have 1-minute speeches. So I am just really guessing. We hope to come back a little after 11.

The Chair recognizes Mr. Daschle.

Mr. DASCHLE. Thank you, Mr. Chairman. I will try to be brief.

I take it that you have essentially stopped work completely on selecting subjects for the pilot study; is that correct?

Mr. CHRISTIAN. That is correct, Mr. Daschle. We began work officially on the pilot study on 1 July, and ceased operations on 15 July.

Mr. DASCHLE. Why did you stop?

Mr. CHRISTIAN. On instructions of the Science Panel and the Veterans' Administration. They advised us that there were serious problems with our method of selecting cohorts.

Mr. DASCHLE. The VA told you to stop?

Mr. CHRISTIAN. Yes, sir.

Mr. DASCHLE. Do you agree with the basis on which they have asked you to stop?

Mr. CHRISTIAN. I personally do not.

Mr. DASCHLE. That is all I needed to know.

How many meetings have you had with the VA over the course of your work on the exposure index?

Mr. CHRISTIAN. Since the middle of December of last year, we have held approximately 29 meetings.

Mr. DASCHLE. Twenty-nine meetings?

Mr. CHRISTIAN. Twenty-nine meetings with the various agencies in connection with the issues of cohort selection and mortality studies.

Mr. DASCHLE. How many have you had since the VA has decided that additional criteria was necessary?

Mr. CHRISTIAN. We have had approximately five meetings since then.

Mr. DASCHLE. Five meetings since then?

Mr. CHRISTIAN. That is right.

Mr. DASCHLE. What have they told you? What additional criteria could possibly be necessary beyond what we have already had? What have they requested of you?

Mr. CHRISTIAN. They have indicated to us that we must select cohorts of troops that were serving in the same geographical area and the same latitudes in South Vietnam. They should be matched troops, and this sort of design, which is extremely difficult for us to come up with.

Mr. DASCHLE. That is what I would assume, too.

Assuming that you had not stopped the work you began on July 1 with respect to selecting the subjects for the pilot study, when would you have completed your task?

Mr. CHRISTIAN. I would have delivered the 1,800 names on 31 December of this year.

Mr. DASCHLE. December 31.

Mr. CHRISTIAN. Yes, sir.

Mr. DASCHLE. Assuming you began work within 7 days, when would you expect the work to be completed if we just mandated it?

Mr. CHRISTIAN. It would take me approximately 6 months to deliver the names after we started.

Mr. DASCHLE. It would take 6 months?

Mr. CHRISTIAN. Yes, sir.

Mr. DASCHLE. I think this is just as clear evidence as can be, Mr. Chairman. Here you have a ready and willing agency of the Federal Government who has provided every bit of data we have requested of them and in a very prompt and efficient manner, and they are now being told to not only stop, but completely delay this process.

I commend you for your work. I just hope that we can give you the wherewithal to continue this without the kind of bureaucratic and bumbling delays that have gone on in the VA for all too long.

Thank you, Mr. Chairman.

Mr. MONTGOMERY. Thank you, Mr. Daschle.

Let the Chair make a comment. We will have the Veterans' Administration panel right after this panel, and then we can bring up these points which have come out. The Chair has been informed that there probably will be a number of 1-minute speeches. We will make this vote, and we will come right back and go right in session. I would like to wrap up this panel if we could.

The Chair recognizes Mr. Dunn for any comments he would like to make.

Mr. DUNN. I have no comments, Mr. Chairman.

Mr. DASCHLE. Mr. Chairman?

Mr. MONTGOMERY. Yes.

Mr. DASCHLE. I just failed to ask unanimous consent to have a couple of documents inserted right after my testimony. If I could do that now, I would appreciate it.

Mr. MONTGOMERY. Without objection, the documents will be put in the record.[1]

I want to thank these gentlemen for being here. You had some very fine observations for us.

The subcommittee will stand adjourned for about 10 minutes. The next panel will come forward and be in position when we come back.

[Recess.]

Mr. MONTGOMERY. The subcommittee will come to order.

Dr. Custis, welcome to this committee hearing. Let the record show that we are very fortunate to have a man of your caliber with the experience you have to be Chief Medical Director of the Veterans' Administration. We have known of your work over a number of years, and we are honored that you head up the VA-medical facilities, which are probably one of the most important elements of the veterans programs. Compensation, pension and medical care are the backbone of the veterans programs. If you would like to introduce your panel with you, you go right ahead.

I am sorry we have to limit you to 5 minutes, but you will get a number of questions. You are probably one of the key witnesses here this morning on this subject, Dr. Custis.

[1] See pp. 159, 160.

STATEMENT OF DR. DONALD L. CUSTIS, CHIEF MEDICAL DIRECTOR, VETERANS' ADMINISTRATION, ACCOMPANIED BY ARTHUR BLANK, DIRECTOR, READJUSTMENT COUNSELING SERVICE, VETERANS' ADMINISTRATION; DR. BARCLAY SHEPARD, SPECIAL ASSISTANT TO THE CHIEF MEDICAL DIRECTOR FOR ENVIRONMENTAL MEDICINE, VETERANS' ADMINISTRATION, A. BETTY FISCHMANN, CHAIRPERSON, CHLORACNE ADVISORY PANEL, ALVIN L. YOUNG, SPECIALIST IN ENVIRONMENTAL SCIENCES, VETERANS' ADMINISTRATION; HOLLIS BOREN, ASSISTANT CHIEF MEDICAL DIRECTOR FOR RESEARCH AND DEVELOPMENT, VETERANS' ADMINISTRATION; HERBERT B. MARS, DEPUTY DIRECTOR OF COMPENSATION AND PENSION SERVICE, VETERANS' ADMINISTRATION; AND JOHN P. MURPHY, GENERAL COUNSEL, VETERANS' ADMINISTRATION

Dr. CUSTIS. I thank you, Mr. Chairman.

With me this morning are Mr. John Murphy, General Counsel of the Veterans' Administration; Dr. Arthur Blank, Project Director of the Readjustment Counseling Program; Dr. Barclay Shepard and Dr. Alvin Young, both of them of the Agent Orange Office at DM&S.

Mr. Chairman and members of the committee, I would like to make a few extemporaneous remarks and then present the shortened version of the opening statement.

Mr. MONTGOMERY. Your statement will appear in the record, without objection.[1]

Dr. CUSTIS. Thank you, sir.

It has been said that the mills of the gods grind slowly and they grind ever so small. It is my observation, not only this morning but for the past several years, that we have a good many gods in this act. I want to assure you that we share your impatience and your frustration.

But I categorically deny that the Veterans' Administration, collectively or individually, has ever purposefully tried to delay the epidemiologic study or any other effort that would seek to find the solution to a very difficult problem. In fact, we would have to be masochists to set ourselves up for the chastisement we would receive for such a deliberate effort in delay.

I have in front of me, Mr. Chairman, a chronologic accounting of where the time went. The only categorical attempt to delay that I recognize in the chronology began in May of 1980 when we were taken to court in the attempt to obtain a restraining action. That delay lasted for 10 months. Once the program got underway again, the efforts to obtain a protocol, with repeated referral back to UCLA for modifications of the protocol, represented a conscientious effort to make sure that the specifics were valid. Each time we did so, it was done with the advice and recommendations of all the vested interests involved, OTA, the Science Panel, and the Agent Orange Working Group.

It is certainly true, Mr. Daschle, that there are many cooks and one stove. I can only assure you now that, in my opinion, we have finally reached a point in time where I believe—and I am sure my

[1] See p. 75.

colleagues agree with me—that we can materially step up the pace of this effort.

Just a couple of references to the earlier testimony. We have over a period of the last 2 or 3 years had available to us a full-time employee in the form of the distinguished physician, Dr. Ted Woodward, who is primarily an infectious disease expert of national reputation, and a epidemiologist with particular interests in Southeast Asia diseases. He has, however, not been available on a constant basis during the past 4 to 5 months as we approached what we hoped would be the beginning of the epidemiologic study.

We also felt that the time has come to put on board an epidemiologic team to closely monitor and follow that study. It was then that we started recruiting for a combination of people who could so serve as an epidemiologic oversight team.

I personally did not know until this morning that Dr. Houk had suggested some epidemiologists in CDC might be available for that purpose. I am told that, although we have had nothing in writing, there has been a verbal discussion of this. If indeed there are candidates in CDC, as we go about our recruiting efforts, we would like to have those names and their qualifications.

As for Dr. Houk's remarks that if all the gods were put in one room and not permitted to exit until some decisions were made, it sounds good, but I submit it is not quite that simple. I have known Dr. Houk since I was commanding officer of Bethesda Naval Hospital and he was a member of the staff. I know where his expertise lies and I respect his opinion, but I submit that he makes it sound a little easier than it actually is. We have not been operating in a rose garden. We have tried conscientiously each time a decision was to be made to touch base with every vested interest and to seek participatory decisionmaking. If anything has slowed down the pace, I submit it is that—our conscientious effort not to put ourselves in the position of being accused down the road of having been arbitrary and not seeking to validate the particulars, the specifics of the study.

Mr. Chairman, one of the more significant of the agency's agent orange activities is indeed the design and the conduct of the epidemiologic study mandated by Public Law 96–151. The third and final revised study protocol was submitted to the Veterans' Administration by the University of California's School of Public Health on April 29 of this year. This protocol had been reviewed by several groups, the VA's Advisory Committee on Health Related Effects of Herbicides, the Science Panel, the White House Agent Orange Working Committee and the Congressional Office of Technology Assessment. It is currently undergoing review by the National Academy of Sciences. We are told this review will be completed in October.

Following acceptance of the protocol, and with possibly some minor modification and refinement, we will indeed proceed with the pilot test of the protocol. If I may insert here parenthetically, the pilot test of the protocol is part and parcel of the epidemiologic study itself. We are not talking about two studies, we are talking about one, that is, two phases of a single effort.

Since initiation of the agent orange registry in 1978, we have continued to provide physical examinations to veterans who are

concerned about their possible exposure to phenoxy herbicides. Approximately 91,000 veterans have received an agent orange examination. We have taken steps to improve our communication with each veteran examined. The veteran is advised of the results of the examination and is given additional testing and treatment if that is indicated. We are now in the process of updating our address records of the examinees, and we will shortly be asking them to advise us of any change in their health status since they received their original agent orange examination.

We have strengthened our efforts to inform veterans about the agent orange controversy. A series of pamphlets have been widely disseminated and publicized. One pamphlet informs the veteran concerned about exposure to agent orange and the health care services made available with the enactment of Public Law 97-72. The most recent pamphlet provides frequently asked questions for which the Veterans' Administration does have answers. The recent pamphlets are available in all VA regional offices, all medical centers, and readjustment counseling vet centers. We intend to continue with this public information method. The next pamphlet will provide a status report on Federal research efforts.

Public Law 97-72 established a new eligibility for basic health care services to any veteran who may have been exposed to dioxin, or was exposed to a toxic substance in a herbicide or defoliant while serving in Vietnam. In providing outpatient care under this authority, Vietnam veterans have been accorded priority ahead of other non-service connected veteran patients, a priority equal to that of former prisoners of war. The guidelines which I alluded to were published in the Federal Register in December 1981. We have analyzed the public comments received and incorporated some of them in changes made to the guidelines since that time.

In addition to the research mandated by Public Law 96-151, the Veterans' Administration has underway a number of additional epidemiologic-like projects and 12 biological research studies, all related to the agent orange controversy. Of critical importance among these are a mortality study which will attempt to discern whether Vietnam veterans are dying at a higher rate than expected and what are the causes of death. Funds have been approved and a protocol is being developed for another study to compare sets of twins, one of whom served in Vietnam and the other of whom did not, to determine whether there are any significant health differences between them.

As part of our continuing effort to keep abreast of scientific developments in the area of dioxin research, our staff played a major role in the planning and organizing of an international symposium on chlorinated dioxins and related compounds in October of 1981. Forty-two VA environmental physicians attended this symposium. We are also contributing information and input for the upcoming symposium to be held in Salzburg, Austria, in October of this year.

Mr. Chairman, turning now to issues concerning the VA's Vietnam-era veterans readjustment counseling program, there have been a number of significant developments in recent months which I shall briefly allude to.

In January, the Veterans' Administration established the program as a new independent professional service on the same ad-

ministrative level as medical, surgical, nursing, prosthetics, and other services, which reports directly to the Deputy Assistant Chief Medical Director for Professional Services. The vet center operation is now the responsibility of the Readjustment Counseling Service. A new Program Director, Dr. Blank, was appointed in February and, in June, a new position, the Chief of Counseling Services, has augmented headquarters management of the program. Management and organization of the vet center program is also being greatly facilitated by the strengthening of the regional coordinator's staff in all of the six medical regions.

All of these developments have been monitored by the agencywide committee for this program under the chair of the Deputy Administrator.

An important development of recent months has been the issuance of a new and clarified program circular. It contains several key elements, including the responsibilities of the Director and the Readjustment Counseling Service staff in the central office, and those of the regional coordinator's staff in the field. We have established unmistakably clear lines of authority and responsibility from vet centers to regional coordinators to the readjustment counseling service in central office. We have spelled out the working relationship between vet centers and their local VA medical center parent facilities.

As a part of reconstituting the management and organization of this operation, we have instituted all necessary financial and accounting procedures which actively track all vet center funds and maintain their earmarked character at the local level. The scope of our program is also expanding through our new fee-for-service contract mechanism, under which we contract with private sector providers to counsel Vietnam-era veterans. We are using a decentralized model with contracting committees at 122 medical centers and, as of August 31, over 300 contracts had been awarded. These will be evaluated as to quality of performance prior to further expansion.

Mr. Chairman, we believe the VA has been responsive to the concerns of Vietnam-era veterans, and that our management of both the agent orange and readjustment counseling programs attest to that fact. We intend to diligently continue efforts in these critical issues of concern to Vietnam veterans and to the Nation.

This concludes my statement, Mr. Chairman. We will be most pleased to respond to any questions you may have.

[The prepared statement of Dr. Custis appears on p. 75.]

Mr. MONTGOMERY. Thank you, Dr. Custis, for that testimony.

I can understand your concern. I believe you are telling the subcommittee that, in your opinion, there has not been any foot-dragging as far as agent orange is concerned and it is on track; is that the bottom line?

Dr. CUSTIS. That is the bottom line, sir. I think all of us would like to have seen things move faster. There was certainly no premeditated effort at delay. I think that when you are running a program of this magnitude, that has the emotional charge this has with all the vested interests involved, the process is slowed down by its very character. But there has been no purposeful foot-dragging on the VA's part.

Mr. MONTGOMERY. Do you agree with the first gentleman's testimony that by 1987 we can have a logical scientific report to base findings on what damage agent orange has done to Americans?

Dr. CUSTIS. Mr. Chairman, I would certainly hope so. I think the best we can do hopefully to assure that is to get about with the implementation of the study now.

I am constrained to say that, in my opinion, this very difficult problem has two aspects: there is the sociopolitical aspect and there is the scientific aspect. I think it is the responsibility of the VA and other Federal agencies that are assisting in this effort to continue diligently to search out the scientific side of this question. I think there is a consensus at the present time that we cannot say in the human being there is any long-term ill effect of agent orange exposure. At the same time, we certainly cannot say that there is not.

As regards the scientific aspect, let's take one example of that, namely the possible carcinogenicity of dioxin. It is well known that the latency period for any carcinogen to prove itself is as long as 17 years. I believe for that reason that whoever follows us in the years and, in fact, the decades, for the rest of the century will have an obligation to continue monitoring and following up on what could be very delayed long-term deleterious effects.

It may well be that the Congress cannot wait for scientific answers in the short term, in which case it may well be that the sociopolitical aspect of this problem will have to be addressed. We can only tell you that we will do our very best to provide you simultaneously what can be made available as regards the scientific side of the question.

Mr. MONTGOMERY. What you are telling us, then, Dr. Custis, is that scientifically, to see the real effects that agent orange might have had on these Americans, it will take a number of years, but with the political/social aspects of it, Congress might have to take action sooner than that. Is that basically what you are saying, Dr. Custis?

Dr. CUSTIS. Yes, sir.

Mr. MONTGOMERY. I have one other question before my time runs out. The other reason for this hearing this morning is on the vet center program. There has been some confusion out around the country where I have been. I think this committee requested that maybe the regional offices or the administrator of a regional hospital would, in effect, look at these vet centers and monitor them to be sure they are not practicing medicine in these vet centers. Is that your policy? Is that what Dr. Blank is watching? What is the policy? Not to slow them down, but to be sure they don't start practicing medicine and causing some problems we are not looking for.

Dr. CUSTIS. May I first ask Dr. Blank to respond to that?

Dr. BLANK. We have tried as a matter of organization and as a matter of practice, especially in this past year, to facilitate the relationship between our vet centers and the VA Medical Center and to encourage the development of close collaboration between the two. I can assure you that the vet centers are not practicing medicine, they are practicing readjustment counseling, providing the social and psychological services to Vietnam veterans with war-related problems that the Congress has mandated for this program.

Mr. MONTGOMERY. Thank you. We had a member of the committee staff go out and look at the different vet centers, and the report has been good, that the program is working.

Mr. Daschle.

Mr. DASCHLE. Thank you, Mr. Chairman.

I guess I would just respond very briefly before I ask some questions to Dr. Custis that they are doing our very best. I don't accept the fact waiting 3 years and still not having an epidemiologist on staff is doing your very best. A part-time volunteer is not doing your very best, Dr. Custis. I think this is just another example of why we are going to have to wait and wait and wait and, yet, Australia and every other agency that has come before us has said they are ready, they don't have to wait anymore. So I guess you can understand our impatience when we hear witnesses and we see others setting an example far better than yours. I just believe the VA is not doing their very best.

Let me ask you, is the main epidemiologic study underway right now?

Dr. CUSTIS. The main epidemiologic study is in that final timeframe where we are waiting for the National Academy of Sciences' opinion of the protocol.

Mr. DASCHLE. Is the twins study underway?

Dr. CUSTIS. The twins study protocol has been funded and is being designed.

Mr. DASCHLE. But it is not underway?

Dr. CUSTIS. There have been 500 identified sets of twins—no, the protocol is being designed.

Mr. DASCHLE. Is the fat study underway?

Dr. CUSTIS. The fat study is an EPA study.

Mr. DASCHLE. But it is not underway either?

Dr. SHEPARD. The study which I believe you allude to, Mr. Daschle, is a joint interagency study which has been proposed and the funding for the initial phases have been approved.

Mr. DASCHLE. But it is not underway?

Dr. SHEPARD. It has not yet started.

Mr. DASCHLE. We have the epidemiology study, the twins study, the mortality study, the fat study, none of which are underway. Yet, we come before the committee and hear that you are doing your very best. I find that a direct conflict in term.

When do you expect the full-scale study to actually begin if everything goes right? When would you say it would begin?

Dr. SHEPARD. We hope to award the contract for the pilot study the early part of next year. We hope to have the request for proposal published by the end of October.

Mr. DASCHLE. I am talking about the full study. When would you begin the full study?

Dr. CUSTIS. As soon as we receive the NAS feedback, the Administrator will be making several decisions. Included in that decision is the matter of the pilot study.

Mr. DASCHLE. Let me state again that I am wondering about the full study.

Dr. CUSTIS. I am saying, Mr. Congressman, that the pilot study is a part of the full study. When the pilot study starts, the full study indeed starts.

Mr. DASCHLE. But you know as well as I do, and let's not deceive anybody in the room here, that that full study isn't going to begin until the pilot study has been nearly completed, if not completed. I am only asking when the full study is going to begin.

Dr. CUSTIS. There is a basic difference in what you are saying and what I am trying to respond to, Mr. Congressman. The beginning of the pilot study is the beginning of the full study.

Mr. DASCHLE. There is no difference?

Dr. CUSTIS. There is the difference that during——

Mr. DASCHLE. Why do we call it a pilot study.

Dr. CUSTIS. Because we know that the Ranch Hand study, when it was first launched, uncovered the need for modifications of procedures. We know that the Australian study was stopped because of a false start. We don't want to repeat that experience.

Mr. DASCHLE. That is what I am asking. You are avoiding the question. Let's assume the pilot study answers the questions you intended it to answer. When does the full study begin in earnest? When do you branch out and actually begin the study?

Dr. CUSTIS. The pilot study, depending on whether it is the two-cohort or three-cohort model, which we will decide as soon as the NAS report is in, will involve between 600 and 900 examinees who will be the first examinees of the full study.

Mr. DASCHLE. In other words you don't see any changes made between the pilot study and completion of the full study?

Dr. CUSTIS. There will be an opportunity to modify the procedure on the basis of the initial experience in the pilot effort.

Mr. DASCHLE. What you are telling me then is that there is no difference. Let me reiterate this, because this is an important question. We can expect that the pilot study is going to give us the answers. At the completion of the pilot study, we can make a decision; is that what you are saying?

Dr. CUSTIS. We expect the pilot study to give us a tremendous amount of insight.

Mr. DASCHLE. Well, you are still not answering my question. When does the full study begin, outside of the pilot study?

Dr. CUSTIS. The full study will begin as soon as we have a contract——

Mr. DASCHLE. 1984 or 1985?

Dr. CUSTIS [continuing]. Which will begin as soon as we have the opinion of the National Academy of Science and a concurrence on the part of all vested interests that this finally it, and will go for an RFP. That could occur anywhere from December of this year over a period of the next 2 or 3 months.

Mr. MONTGOMERY. I am hoping that we might wrap up the panel before we have to go vote, which is going to be about an hour's vote. I would certainly like to recognize Mrs. Heckler and also Mr. McEwen.

Mrs. Heckler hasn't had an opportunity to speak, and I invite her to participate. Go ahead.

Mrs. HECKLER. Thank you, Mr. Chairman. It is unfortunate that the timing is operating against us today.

I have been working on the problem of agent orange for about 5 years, and I have to say, Dr. Custis, it is very, very discouraging to

see that the timeframe for potential resolution is so drawn out that the end is nowhere near in sight.

Now, I wonder just how much of the $140 million VA research budget is presently being spent on agent orange?

Dr. CUSTIS. I would respond to that by calling your attention to what we know specifically is being spent, plus an unknown volume of resources going toward the care for Vietnam veterans who have ailments that may be due to agent orange exposure.

We have a protocol that will identify the volume of patients being seen. And until we can get an accurate measure of what that volume is, we can only estimate what dollars have been utilized in their care.

As far as the Agent Orange Office and its efforts, the Administrator has just recently authorized $5 million to be spent over the period of 1982 to 1984 timeframe. These numbers are not clear in my head.

Can you take this question, Dr. Shepard?

Dr. SHEPARD. Yes. We have, in the 1982 approval, some $5 million related to agent orange activities, most of which will be directed at agent orange research and the epidemiological study. The initial phase of the epidemiological study will represent the bulk of that.

Mrs. HECKLER. We have $5 million devoted to research and to agent orange out of a $140 million budget. Where is the commitment of the Veterans' Administration to the resolution of this problem?

That is an incredible amount——

Dr. CUSTIS. I could give you an estimate that would be in the magnitude—if all things were counted—of some $50 million. If you will permit this to be submitted for the record, we will make that estimate as accurate as possible. I am talking about provision of care for those who are—the physical exam program, research programs, the registry program, the cost of care for those who are taking advantage of Public Law 97-72 and——

Mrs. HECKLER. Doctor, if I may just interrupt, because we do have a vote on. My question is on the amount of research funding that is allocated to agent orange. As I heard your testimony and your associates' testimony, it is that $5 million out of a $140 million budget for research is being allocated to this, in 1 year.

One of the major problems facing the whole Vietnam-era veteran population, and this is a priority that is receiving the attention of $5 million out of that total research budget. I don't understand how that can be justified.

Dr. CUSTIS. Well, that is the figure.

Mrs. HECKLER. Well, what are the other priorities that are so much more important than this?

Dr. CUSTIS. I think there is no greater priority. There is also a limit to what can be done, researchwise. The——

Mr. MONTGOMERY. Would the gentlelady yield at this time? I think we are going to have to go vote. We would like the panel to remain. Maybe we can finish up with you in 15 or 20 minutes, but the committee will recess until 11:45, and then we will move right back into the questions. We have two other panels, and maybe we can finish it up after that.

[Recess.]

Mr. MONTGOMERY. The subcommittee will come to order.

Dr. Custis, I believe you wanted to make a comment as to an answer you gave to one of Mrs. Heckler's questions.

Dr. CUSTIS. Yes, Mr. Chairman.

In retrospect, I am sure that Congresswoman Heckler was talking strictly about research. We do, indeed, have with us the exact dollar figures in the research budget that are devoted to agent orange problems.

And I have an itemization of those studies and their dollar costs, which I would like to submit for the record. It amounts to $5,045,000 in fiscal year 1982; and $4,006,000 in fiscal year 1983.

But I think something more need be said. I would like to ask Dr. Hollis Boren to address this subject from the standpoint of the austere circumstances under which we operated in the 1982 research budget.

But before I call on Dr. Boren, I would like to say something else about the general subject.

I think it is perhaps misleading to translate total dollar commitment when you are talking about research as a measure of meaningful output. I am thinking of the Nixon administration and the billions of dollars that were thrown at cancer research, to little or no avail.

I would also ask Dr. Boren to draw for you the perspective of the VA's research role in the overall effort of the Federal agencies. Some 64 studies are underway. I think it would be injudicious of us to repeat, or to overlap, or duplicate those other research efforts.

I would also request that a listing of those total 64 protocols in all Federal agencies, together with the VA's 17 protocols in agent orange research we accepted, be inserted, for the record.

Mr. MONTGOMERY. Without objection.[1]

Dr. CUSTIS. Dr. Boren?

Dr. BOREN. Thank you.

In regard to what our relative budget is, we are looking at the total Federal research budget of about $40 billion, of which we are just over one-tenth of $1 billion. Within this amount, in addition to our overall research programs, we have gotten some additional 10 protocols compared to the total Federal protocols in this area, of some 50 that have been done.

We have done this this year in the face of the large cuts in our research program, where we lost our career development program, our RAGS program to recruit people as our chiefs of staff and our service chiefs; our investigator-initiated programs; all of the things which build, involving care for our veterans.

Despite these cutbacks, we were able and went forward with a request for proposals for specially selected projects. We received 34 such proposals: 10 of these were scientifically meritorious, and were funded this year and are ongoing.

And these will continue with a total cost as approved, providing funds are available, of $2 million.

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[1] See p. 83.

So this is what we have specifically earmarked that has happened in fiscal year 1982 and in addition, as Dr. Custis says, we have held out the $5 million to go on in fiscal year 1983.

Mrs. HECKLER. Well, Dr. Custis, first of all, I would disagree with you in terms of the result of the cancer research. While we haven't found the total breakthrough in prevention of cancer, I think the incredible statistics on the success of healing processes has to be attributable to the research, and I think that we have a great deal to be proud of in terms of cancer research.

Dr. CUSTIS. I don't underestimate that, Mrs. Heckler. I am talking about throwing money and value received from billions of dollars of that kind of effort.

Mrs. HECKLER. Well, I don't know—I think there have been a lot of values received, a lot of human beings have been restored to life because of——

Dr. CUSTIS. We have a long way to go in funding the cause of cancer. A long way.

Mrs. HECKLER. Yes, we do. And we have to spend a great deal of money, and we perhaps have to waste a great deal in research effort. But we have made significant progress, and I think all of us know of so many cases—I had three staff members in my own staff who became the victims of cancer, and all are doing very well, have resumed their careers, and I would think that the cancer research was effective.

Now, in terms of the agent orange research, I really wonder how deep the commitment is. A $5 million commitment is not staggering amount of money. But I also wonder what is the coordination between the Veterans' Administration program and all the other agencies working on research on this subject?

Dr. CUSTIS. That is exactly one of the reasons motivating the agent orange work groups organization. That is one of their responsibilities.

Mrs. HECKLER. Well, I mean, what is the progress of this?

Dr. CUSTIS. A good many of these 64 protocols in other agencies also are receiving funds from sister agencies. For example, we are working with EPA; we are working CDC; we are putting VA money into their protocols, too.

Mrs. HECKLER. Well, it seems like a timeless, endless progress of investigation and study leading to no timely conclusion. As I think has been pointed out, potentially we could have geriatric problems with the victims if we would progress along this unlimited timeframe.

Dr. CUSTIS. Would you like to hear about our dollar commitment to geriatrics, Mrs. Heckler?

Mrs. HECKLER. I know about your geriatric——

Dr. CUSTIS. Much more impressive.

Mrs. HECKLER. Well, let's look at this. Because that is impressive, too. But here we are dealing with the problems of the Vietnam veteran. As you know, I think that there is a great deal of recognition that chloracne and soft tissue sarcomas have been found in many of those who have been exposed to agent orange.

I wonder what your thinking would be, since there is so much scientific evidence of the correlation between agent orange exposure and these particular problems. Do you think that the Congress

should enact a limited program of temporary compensation for veterans with these conditions as a means of addressing what are well-recognized and clearly connected symptoms of that type of exposure?

Dr. CUSTIS. We have the expert of chloracne with us this morning, if you like to hear from her. Dr. Fischmann.

Dr. FISCHMANN. The examination of the 93,000 veterans has disclosed that possibly 12 or 13 may have had or presently have chloracne.

Mrs. HECKLER. 96,000?

Dr. FISCHMANN. Yes.

Mrs. HECKLER. And only 12 or 13——

Dr. FISCHMANN. Correct.

Mrs. HECKLER [continuing]. Have been proven to have chloracne?

Dr. FISCHMANN. Right. There were many, many cases, for instance, of tropical cystic acne. Chloracne is a very specific eruption, and that has not been found widely in the veterans.

[Subsequently the VA provided the following clarifying material for the record:]

By way of clarification, it should be noted that the reference to some 90,000 veterans represents the number of veterans who received an Agent Orange examination at a VA health care facility. In a separate initiative the Agency has been reviewing compensation claims involving skin conditions to identify questionable cases in which the veteran's skin condition may in fact be chloracne. Over 3,200 rating decisions on skin condition claims have been reviewed by VA Central Office physicians. The medical records of questionable cases were reviewed by Dr. Fischmann, who is a dermatologist consultant at the Washington VA Medical Center. She has tentatively identified 12 cases requiring a further clinical review which will include physical examination of those individuals at selected non-VA clinics. We intend to continue our review of Rating Decision Sheets provided by VA Central Office Compensation and Pension Service to determine possible chloracne cases and recommend selected claimants for special dermatological examination. Additionally, we will review and analyze Agent Orange Registry data relating to types of skin conditions being reported by participants.

Mrs. HECKLER. Are you aware of the number of cases in any study of soft tissue sarcoma as a result of agent orange exposure?

Dr. FISCHMANN. I am not familiar with that. Perhaps Dr. Young may be familiar with that.

Mrs. HECKLER. I would ask you then, Doctor, in the case of the chloracne already discovered, although these figures are shockingly low and very contradictory to the information that I have received from so many other sources, nonetheless, if your figures are absolutely correct, then would you say that the Government should have a program of compensation for Vietnam veterans who are the victims of this at this point.

Dr. FISCHMANN. These veterans, if they develop their acne during their service in Vietnam, are already being compensated for.

Mrs. HECKLER. They are being treated. Are they being compensated?

Dr. FISCHMANN. They are being compensated, Mrs. Heckler.

Mrs. HECKLER. What is the level of compensation?

Mr. MONTGOMERY. It would depend on the severity of it, I assume, Mrs. Heckler, 30, 40, 50, or zero.

Mrs. HECKLER. In terms of money, what percentage do we have? Could you provide this information for the record?

Dr. FISCHMANN. I am not familiar with the actual compensation those veterans are receiving.

Mrs. HECKLER. Is it possible, Dr. Custis, to have that information made available for this committee?

Dr. CUSTIS. Yes.

Mr. Herb Mars of the Department of Veterans' Benefits.

Mr. MARS. Mrs. Heckler, the individuals who we service connect for these skin conditions receive compensation based upon the level of disability that we find according to our rating schedule. Offhand, I don't know what the levels are, but most skin conditions vary between 10 and 30 percent disabling.

Mrs. HECKLER. Could you quantify that in dollar figures?

Mr. MONTGOMERY. Mrs. Heckler, we have it right here. Would you read that for her, please.

Mr. MCDONELL. Ten percent is $58 monthly compensation; 20 percent is $107 monthly compensation; 30 percent is $162 in compensation; 40 percent is $232; 50 percent is $328.

Mrs. HECKLER. On what basis are these figures established?

Mr. MARS. Our rating schedule calls for relating the disability to the effect upon the employability of the individual. On that concept, we examine the individual, we look at the medical facts, and we have rating boards which consist of a doctor and two experts who make a determination of it. They assign the percentage disability according to the rating schedule.

Mrs. HECKLER. Is there any compensation for soft tissue sarcoma?

Mr. MARS. There would be and, if a relationship is shown in an individual case of any carcinoma to the period of service, then we would pay compensation on that basis also.

Mrs. HECKLER. Have there been any Vietnam veterans who have received compensation for soft tissue sarcoma?

Mr. MARS. I would have to check to find out the specific disabilities and, where there is such, we can furnish that for the record.

Mrs. HECKLER. Please provide that for the record.

[Subsequently, the Veterans' Administration provided the following:]

Malignancies of connective and other soft tissue occur in the blood vessels, fat, ligaments, muscle, nerves, tendons and various other tissues found in all body systems. The Schedule for Rating Disabilities used by the Veterans Administration classifies malignancies by the body system in which they occur. For example, all malignancies of the genitourinary system would have the same diagnostic code whether malignancies of the soft tissue or of the kidney or bladder. Therefore, we are unable to determine from our statistics regarding compensation for service-connected disabilities the number of veterans who have received compensation for soft tissue malignancies.

Mr. MONTGOMERY. Thank you, Mrs. Heckler.

We have about 2 minutes left before we have to go vote again. Mr. Stump will be back and we will get the last two panels, and we will complete the hearing this morning.

Before we dismiss this panel this morning—and thank you very much for being here—do you have any other questions, Mr. Daschle?

Mr. DASCHLE. Mr. Chairman, I do. I will just proceed until my time is out, I guess.

There has been some obfuscation, I think, about the pilot study versus the full study. The HHS, I think, made it very clear when they announced that we had a pilot study that the VA would conduct a pilot study "as the forerunner of a more comprehensive study." The comprehensive study would then involve some 18,000 veterans. I think there was an effort this morning to at least give the impression that they were one and the same, and they certainly are not.

Dr. Custis, I am going to quote the Agent Orange Working Group's Science Panel review's statement on the proposed protocol design for the epidemiological study. They quote: "The panel unanimously agrees that the Department of Defense should select the cohorts in accordance with Dr. Bricker's cohort selection paper." That was in March of 1982, and the VA is represented on this panel, correct?

Dr. CUSTIS. Yes, sir.

Mr. DASCHLE. How would you explain that 4 months after everyone had concluded unanimously that we approve that selection paper, that you have changed your mind and decided a new criterion was necessary?

Dr. CURTIS. As I said before, that decision has yet to be made. It will be based upon the pros and cons of the two-cohort versus the three-cohort study.

Mr. DASCHLE. But you agreed unanimously in March, did you not?

Dr. CUSTIS. There have been reconsiderations of the implications of that recommendation.

Mr. DASCHLE. Did you have an epidemiologist make any reference to this? Did you refer to an epidemiologist?

Dr. CUSTIS. There have been epidemiologists participating.

Mr. DASCHLE. Professional VA epidemiologists?

Dr. YOUNG. Certainly within the Agent Orange Working Group we have had a number of epidemiologists look at the issue of sampling versus selection. This is what it comes down to.

Mr. DASCHLE. Who made the decision to change? After you unanimously agreed, who then made the decision?

Dr. YOUNG. The unanimous decision had to do with concept, not with detail for protocol. That is the issue right there.

Mr. DASCHLE. But you are talking about the concept here.

Dr. YOUNG. We are following the concept to date. We haven't changed the concept. It is how one goes about sampling.

Mr. DASCHLE. From the testimony earlier, that wasn't their understanding. The understanding was that everyone agreed unanimously, and now you have backed off after 4 months. That is what I don't understand.

We have a vote and we are very short on time.

When I first asked the VA about making compensation decisions, you said that animal studies weren't sufficient, that human studies were necessary. After my colleague, Dave Bonior, and I produced case control epidemiological studies from Sweden, you said that it had to be studies on Vietnam veterans. When do you plan to establish a statutory framework for determining how much and precisely what kind of evidence it will take you to act on compensation, and will such a model be completed before the Air Force Ranch

Hand or Center for Disease Control studies are completed next year?

Dr. CUSTIS. Mr. Daschle, I submit that is more of an editorial than a question. It is a question that I simply, with the current state of knowledge, cannot answer, and you know that I cannot answer it.

Mr. DASCHLE. You can't answer it?

Dr. CUSTIS. I cannot. We hope to be able to as soon as possible.

Mr. DASCHLE. Let me go back to one more point. I still have a green light, Mr. Chairman. I just have one followup question.

Who made the decision to back off from the unanimous agreement?

Dr. CUSTIS. Which unanimous agreements?

Mr. DASCHLE. On Dr. Bricker's cohort selection.

Dr. CUSTIS. That has not been backed off of. It is my understanding that the science panel has asked them to hold off until further consideration be given; isn't that the fact?

Dr. YOUNG. We are trying to better define the sampling method.

Dr. CUSTIS. You are quoting several things there, Mr. Daschle, that are indeed not facts yet. The figure 18,000 is something that has not yet been decided. That depends on the number of cohorts. We have been talking in terms of 6,000 per cohort. If it is a 3-cohort study, it will indeed be 18,000. The decision hasn't been made.

Mr. MONTGOMERY. We will have to go. We thank you very much.

We will start with the gentleman from Illinois, Mr. Berning, when we come back.

[Recess.]

Mr. STUMP [presiding]. The meeting will come to order, please.

Our next witness will be Senator Berning, chairman of the State of Illinois Agent Orange Study Commission.

STATEMENT OF KARL BERNING, CHAIRMAN, STATE OF ILLINOIS AGENT ORANGE STUDY COMMISSION, ACCOMPANIED BY JOHN O'CONNELL, COCHAIRMAN, STATE OF ILLINOIS AGENT ORANGE STUDY COMMISSION; AND JOAN MAIMAN, PUBLIC RELATIONS DIRECTOR, STATE OF ILLINOIS AGENT ORANGE STUDY COMMISSION

Mr. BERNING. Thank you, Mr. Chairman.

I would hope there would be some members of the committee back before we get through because we would like to convey to the committee the concerns that have developed among our Vietnam veterans in Illinois.

I know that you have before you a copy of the statement I am about to make. I am appreciative of the time constraints. However, I would like to read it into the record and then be available for questions.

Mr. STUMP. Senator, your entire testimony will be printed in the record.[1]

Mr. BERNING. I understand. As I said, having served and am still serving on a legislative body, I know how time gets away and it is

[1] See p. 92.

impossible to read everything one gets. So I would like to read this into the record. I will edit it somewhat.

I want you to know, first, that we, the Illinois Agent Orange Study Commission appreciate being here. I want to introduce two of the commission members, Commissioner Joan Maiman on my left, and Commissioner John O'Connell on my right who is cochairman.

Mr. Chairman, the State of Illinois Agent Orange Study Commission consists of eight legislators, one of whom is a Vietnam veteran—that is the Cochairman John O'Connell on my right—and five public members appointed by the Governor, three of whom are former members of the armed forces in Vietnam and one, a Red Cross worker in Vietnam, and that is Commissioner Joan Maiman here on my left.

We have held several hearings and will be holding more.

I will skip over the rest and report to you that the litany of complaints is repetitive and includes, among others, chloracne or some skin problem, numbness in hands and feet, severe abdominal pain, headaches, fits of rage or depression, cancer and, of greatest concern, the apparently higher than usual percentage of birth defects in children. However, the way the Vietnam veterans have been brushed off by VA hospitals and doctors, according to repeated statements, is the most infuriating aspect of the veterans' efforts to get help. This treatment and attitude has caused deep animosity.

I am not interested in criticizing or attacking, but we in the Illinois Legislature representing all Illinois citizens feel there has been too much delay in facing up to what, to many of us, is an obvious, urgent problem of huge dimensions. Continued studies of various aspects of the agent orange problem are necessary, I suppose, and should be continued. However, I remind you, ladies and gentlemen of the committee, our fellow citizens are suffering and dying today, with little or no help from their Government—even treated with abuse and contempt by the VA, according to repeated testimony the Illinois Agent Orange Commission has listened to.

The excuse that dioxin has not been proven to be the cause of health problems is of no comfort to those who can get no relief from pain. I suggest the pain and death are real, and there is no proof that they are not caused by dioxin. These veterans deserve help today.

Members of the committee, we thank you for your courtesy in listening to our brief testimony. We stand ready to answer questions and would be very pleased to share with you some of the heart-rending accounts of the ordeals of some of those who have appeared before the Illinois Agent Orange Commission.

Now, Mr. Chairman, I would defer to cochairman, Representative O'Connell.

Mr. STUMP. Mr. O'Connell, we have a vote on again, so we would appreciate your brevity.

Mr. O'CONNELL. Thank you, Mr. Chairman. I will be brief.

My name is John T. O'Connell, a member of the Illinois House of Representatives. As Senator Berning indicated, I am cochairman.

I would like to state at the outset that a good portion of the final passage debate in the house centered on the appropriate role that Illinois should have in what is, in a liability sense, a Federal ques-

tion. Some of my colleagues in the house contended that the determination of causative factors in the exposure to agent orange should properly be left to the Federal Government. My reponse to that contention is that in the parlance of a factfinding process, the "adversary is investigating itself." While this is not meant to denigrate the good intentions of the Federal Government in achieving objective determinations, we felt the additional evidence produced by our State commission and other State commissions will bolster the Federal record of evidence and contribute to the overall veracity of your conclusions.

We would also respectfully submit that too much time has transpired before comprehensive structured testing has taken place in the Veterans' Administration's part. Our evidence, even at this early stage in our hearing schedule, indicates that problems do exist. The testimony we have heard thus far has presented a commonality of symptoms ranging from rash outbreak, nervous disorder, and mood change, to more serious problems such as cancer and genetic defect. We are not at this stage in the evidence gathering, nor do we have the expertise to make any medical determinations when all the evidence is acquired, to say there is any causal factors with agent orange. However, we can say to you that these questions of medical disorders have been raised with the VA for years, and it has only been recently that serious testing has begun.

We feel that more should have been done to alert Vietnam veterans of the possibilities of ill effects from exposure to this defoliant. We have all heard all too often from vets that they never related their problem until they read in a book or saw a television documentary or heard a radio documentary. I have yet to hear that the inquiry into agent orange was initiated by the VA. While the VA does have an agent orange program, we question the effectiveness of such tests that do not include the analysis of tissue. We can state that the VA has not placed such testing on a priority scale at least in one of the Illinois locations we heard testimony. In questioning the persons who administered the tests, we discovered he had no formal medical training. This does not contribute to our belief or, more importantly, the area veterans' belief that the VA is doing everything they can. Incidentally, out of the 600 persons tested in this area, not one was found to have symptoms of adverse effects from agent orange.

Finally, our concern then is that the VA has had to be pulled into this controversy. Our testimony to this date points to the fact that the VA, at least in Illinois, has been unresponsive to this issue. We feel our citizens deserve better treatment. We hope that you will exercise your congressional muscle to obtain such treatment. We also hope that the answers to questions raised for the last decade will be answered well before 1988.

Thank you.

[The prepared statement of Mr. O'Connell appears on p. 96.]

Mr. STUMP. Gentlemen, let me assure you that this committee shares your concern about finishing this as expeditiously as possible. I am sure that some of the members who are still on the floor voting will have questions and, if they submit them to you, we would appreciate your answers. They would be made part of the record.

Mr. O'CONNELL. Thank you.

Mr. BERNING. We will stand ready to answer questions, and will stay as long as necessary; is that your intention?

Mr. STUMP. I have to recess within the next 2 or 3 minutes. We have two more panels. Until another member comes along, I will have to go vote. It will be necessary that I be gone for about 10 minutes and then we will resume with the last two panels, if they can bear with us.

Mr. BERNING. Will we have an opportunity to present additional comments to the committee and respond to questions?

Mr. STUMP. That would be up to the chairman. I don't know whether any other members are coming back. Perhaps at a future date or at a later time, if he is willing to reconvene for that purpose, or you are always welcome to submit it for the record.

Mr. BERNING. Let me just say that my interest would be in sharing some of the testimony we have heard. Some of it is heart-rending, all of it is distressing. It would have been a distinct pleasure to have had an opportunity to appear before the members of the committee, or a sizable proportion of them, and not to you, sir. Yet, I commend you for your interest and your patience. We will wait for a while to see whether or not we will have an opportunity to elaborate.

Mr. STUMP. Once again, your statement will be made part of the record. Whether the members read it or not, that is up to them.

Mr. BERNING. They won't read it. I know that from personal experience. That is [illegible] I wanted to get it into the record.

Mr. STUMP. I [illegible] suggest to you that you may want to send a copy to the mem[illegible]his subcommittee.

Mr. BERNIN[illegible] W[illegible]shed 75 copies to Mrs. Barbara Daniel. I assume that t[illegible]y w[illegible]ributed to the other members.

Thank you.

Mr. STUMP. Du[illegible] we have been here since 8:30, I think I will skip this v[illegible], go ahead with the next panel. If we may call on them instead of recessing.

Mr. Paul Egan and panel I, please.

STATEMENTS OF PAUL S. EGAN, DEPUTY DIRECTOR, NATIONAL LEGISLATIVE COMMISSION, AMERICAN LEGION; JOHN F. SOMMER, DEPUTY DIRECTOR, NATIONAL VETERANS AFFAIRS AND REHABILITATION COMMISSION, AMERICAN LEGION; PETER CURRIER, DEPUTY NATIONAL SERVICE LEGISLATIVE DIRECTOR, AMVETS; AND PHILIP R. MAYO, SPECIAL ASSISTANT, NATIONAL LEGISLATIVE SERVICE, VETERANS OF FOREIGN WARS

STATEMENT OF PAUL EGAN

Mr. EGAN. Mr. Chairman, John Sommer, the Deputy Director of our Veterans Affairs and Rehabilitation Commission, will be presenting our formal testimony. Before turning the microphone over, I would like to remind this committee that the American Legion employs a full-time field staff that does site visits to the VA hospitals and, in the last year and a half, we have taken it upon ourselves to monitor the quantity and character of agent orange examinations, as well as visiting vet centers across the country. We

would be more than happy to share that information with this committee.

Mr. STUMP. Thank you, Mr. Egan. That will be made part of the record.

[The information appears on p. 163.]

Mr. STUMP. Mr. Sommer.

STATEMENT OF JOHN SOMMER

Mr. SOMMER. Thank you, Mr. Chairman and members of the subcommittee.

At the outset, we will address the status of the protocol of the epidemiological study of long-term health effects of agent orange exposure mandated by Public Law 96-151, as we perceive it.

As has been mentioned earlier, the National Academy of Sciences is conducting a review of the protocol, and that agency should report its recommendations to the VA later this month. The next step is to implement the pilot study to determine the feasibility of the congressionally mandated epidemiological study, and it is at this juncture that the American Legion must proffer several points of concern.

Prior to the implementation of the pilot study, a request for proposal, or RFP, must be published by VA for the purpose of securing proposals from qualified universities and scientific firms interested in conducting the study so that a contract may be let. We feel that the RFP should be put out as expeditiously as possible so as to prevent additional lost time.

There is also an ancillary problem that needs to be resolved, as was reported earlier. The Agent Orange Working Group has recommended that the study be expanded to include a third cohort of veterans who did not serve in Vietnam. Use of the third cohort would expand the study, as authorized by Public Law 97-72, to include other factors of Vietnam service, as well as the research on the effects of agent orange exposure.

Subsequent to the working group recommendation, in April 1982, the Army Agent Orange Task Force was directed to begin a search for the purpose of establishing the third cohort. However, the project was ordered stopped on July 15, pending further guidance from VA on the method of the selection of the third cohort, guidance which has yet to be issued.

Time is of the essence. We feel that a decision must be made now as to whether the study will include two or three cohorts of veterans. If it is decided that the third group is to be added, we would urge that the VA provide the necessary guidelines to the Army Agent Orange Task Force so that they may proceed with their selection process. Failure to exercise decisiveness on this issue will only cause further delay in the commencement of the pilot study.

Mr. Chairman, our final concern with the Public Law 96-151 study is related to the conduct thereof. As has been expressed on many occasions, The American Legion is opposed to the agent orange study being conducted by the Veterans' Administration, not because we doubt the integrity of the VA, but because we are concerned that the end results may be subject to question concerning possible conflict of interest, and it is felt that the findings of an in-

dependent scientific entity would be more readily acceptable to Vietnam veterans. We feel strongly that the study should be completed on a contract basis.

We have presented a compendium of major agent orange research projects in our full statement to demonstrate the magnitude of the total effort being put forth to determine the possible consequences of exposure, which is illustrative of a much different scenario than the inert picture we apprehensively viewed when dioxin exposure first became an issue of great concern.

However, as was previously stated, time is of the essence in this critical matter. Since the enactment of Public Law 96–151, 3 years have passed and even a pilot study has yet to commence. Now it appears that the majority of conditions are such that the Veterans' Administration is prepared to proceed with this scientific study. The American Legion urges that the VA act in an expeditious manner in the consideration and implementation of the National Academy of Sciences' recommendations upon receipt thereof.

The basic policy of the Legion on this issue is that it is the responsibility of the U.S. Government to determine health problems that may be the result of agent orange exposure and be prepared to accept the consequences of its own actions, regardless of what those consequences may be, and regardless of the cost.

On the second subject of the hearing, Mr. Chairman, the American Legion is convinced that the vet center program is accomplishing the purpose for which it was designed. Our field representatives visit the vet centers during site visits to VA medical centers, and their reports, for the most part, have contained positive comments and have been complimentary of the program.

Recent increases in the staffing of the offices of the regional coordinators should certainly prove effective in increasing the supervisory and administrative capabilities of these individuals.

We would like to offer one recommendation with respect to the guidance and training that is provided the vet center teams. In a small number of instances, we have found that the vet center staff were not familiar with VA regional office operations, and there have been a few times that the Legion representatives have found that responsible information on the issue of agent orange was not readily available. We feel that it is important that all team members be aware of the activities of the regional offices, have some knowledge of veterans' benefits and how to apply for them, and be able to provide veterans with up-to-date information on agent orange.

In conclusion, the American Legion will continue to support the vet center program. A substantial percentage of those benefiting from the services available at the vet centers are combat veterans who have had a great deal of difficulty in making the adjustment from Vietnam service into a civilian society, and many are suffering from posttraumatic stress disorder and other problems related to their war service. The number of Vietnam veterans seeking help and counseling has increased, and it can only be hoped that those individuals bearing the greatest burdens as a result of Vietnam will be able to reached.

Mr. Chairman, that concludes our summary.

[The prepared statement of Mr. Sommer appears on p. 97.]

Mr. STUMP. Mr. Currier.

STATEMENT OF PETER CURRIER

Mr. CURRIER. Mr. Chairman, AMVETS deeply appreciates this opportunity to offer its views concerning the status and activities of the Federal Government concerning the issue of agent orange exposure.

Since 1977, the American veteran community, and indeed the world, has been aware of concerns expressed by Vietnam combat veterans over their exposure to the various agents used as herbicides during that conflict. Many fears that long-term health effects of this exposure were voiced and, as a result, the Veterans' Administration and Congress went to work to set up a procedure through which a Vietnam veteran could receive treatment and examination to alleviate these fears. Additionally, the Veterans' Administration, under the guidance of this body, has undertaken a series of studies to determine if in fact there are any long-term health effects associated with human exposure to the various agents used during the Vietnam conflict.

These studies are now in motion and will, if completed, provide useful information regarding the long-term effects of the various herbicides on our Vietnam veterans and will serve to provide information to the world about the health effects of human exposure.

At a briefing with the immediate past Deputy Administrator of Veterans Affairs and members of the Veterans' Administration Environmental Medicines staff, AMVETS was privileged to learn of and comment on the ongoing efforts of the Veterans' Administration to gather information on this issue. We were provided at that time with a packet which briefly outlined these efforts and were told at that time that approximately 82,000 Vietnam veterans, or roughly 3 percent of those individuals who had served in Vietnam had been examined. Additionally, we were advised of the status and plans to at that time to disseminate information to the field as well as gather information therefore, and basically we were satisfied that the effort to reach out to the Vietnam veteran and explain the issue and, therefore, alleviate some of the hysteria naturally associated with such an issue were of a positive nature.

Our concerns now center around the fact that, in light of these activities, in light of the information activities of the Veterans' Administration, as well as the Ranch Hand study, the CDC birth defects and military service in Vietnam study, the VA Vietnam veteran mortality studies, the Australian Vietnam veteran health study, and the VA epidemiologic study of Vietnam-era veterans, there still remains a great deal of work to be done at bringing the Vietnam veterans in for the examination for the purpose of gathering some data on their present health.

It is our concern and we feel the concern of many others that a greater effort to accommodate the Vietnam veterans who must work day to day should be made. For example, many locations provide agent orange examinations only during the working hours of 8:30 to 4:30. Consequently, there is a large portion of the veterans population which cannot take time off during the workday or workweek in order to obtain a free and comprehensive examination. We

feel a greater emphasis on providing these accommodations by the Veterans' Administration is needed. In this way, a greater number of Vietnam veterans will be able to avail themselves of the program and, in turn, will provide much needed data if, for no other purpose, than to identify themselves as combat veterans.

Parenthetically, Mr. Chairman, during previous testimony today, we have heard of the great deal of difficulty in identifying combat veterans. We submit to the Veterans' Administration staff here and to this committee that if the Vietnam veterans were encouraged and greater numbers could come forward for the exam with their 214, there would be no identification problem.

By increasing the number of examinations, the Veterans' Administration will have a ready-made listing of Vietnam veterans on which to draw for their studies. We do not feel that such an outreach would affect the objectivity of these studies, but rather would enhance them.

There has been much good work done by local and State organizations in the area of identifying these individuals and encouraging them to come forward for the exam. However, the Veterans' Administration has yet to make a concerted effort to bring in these individuals. We feel that the present day statistics of 91,000 combat veterans who have been examined, or less than 4 percent of all individuals who served in combat, is unacceptable. Since the previously mentioned meeting, at which time we were told approximately 3,000 individuals were being examined per month, the number has dwindled to less than 1,600 being examined. At this rate, of course, it will be many years before any sufficient data is gathered on the health effects and trends among these Vietnam veterans.

Mr. Chairman, one can cite all sorts of statistics, numbers, and emotional information regarding this very volatile issue. The bottom line, however, is that concomitant to the ongoing gathering of information, the gathering of information on the veterans through examination needs to be done. AMVETS is supportive of the efforts shown by the Veterans' Administration to date and their intentions as regards the various studies to be undertaken. We only hope and therefore request of this committee that an effort be made to somehow insulate this program from any austerity measures of the present administration. Recognizing that these studies are, of necessity, long term in nature, we feel it would be a shame to suspend them either now or on the future.

Mr. Chairman, AMVETS, as has had other organizations and agencies, has published an agent orange self-help guide which is made available upon request to any veteran who desires information on the issue. We take the position that Vietnam veterans should avail themselves of this opportunity to be examined by the Veterans' Administration if for no other reason but for peace of mind. These community-based organizations such as AMVETS and the other veterans organizations can only do so much, however. The Veterans' Administration, by its very nature, can do a lot, and we feel should do a lot. We hope this committee listens closely to the comments of the individuals who have appeared before it today and then, by its actions, seeks to step up the gathering of information through Veterans' Administration agent orange examinations nationwide.

Mr. Chairman, again, we appreciate the opportunity to express our views, as always. This completes our testimony.

Mr. STUMP. Thank you.

[The prepared statement of Mr. Currier appears on p. 100.]

Mr. STUMP. Mr. Mayo.

STATEMENT OF PHILIP MAYO

Mr. MAYO. Thank you, Mr. Chairman. I am Phil Mayo with the Veterans of Foreign Wars.

We have been involved with this issue for about 4 years now, and the Congress has mandated, as you well know, a number of studies to be completed. We still don't have a protocol, we don't have on board an epidemiologist, we don't have yet a real grasp on what will be done and when.

What is at stake in this issue, I think, is the health of those who have sacrificed the best years of their life for their country. It transcends the faith of the people in the Government and its ability to do what is necessary to protect our way of life. We believe that the DOD task force has perceived the significance of this issue.

Therefore, we ask why must we endure this procrastination and this malaise. We urge the Congress to use its influence in getting this effort moving, as the Congress has in the past shown great initiative, understanding, and compassion toward veterans in legislating benefits for them.

We suggest that the time may be close at hand again to take additional legislative action addressing herbicide related issues.

This concludes my statement.

Mr. STUMP. Thank you, Mr. Mayo.

[The prepared statement of Mr. Mayo appears on p. 102.]

Mr. STUMP. Gentlemen, thank you for your fine testimony and thank you for your patience.

Let me ask you, you represent the largest veterans organizations in this country, if any of your organizations or if any of you have had any recent reports which reflect the unsatisfactory service concerning agent orange medical examinations as was expressed by the delegation from Illinois?

Mr. SOMMER. Mr. Chairman, I am John Sommer with the American Legion.

We have experienced through the use of our questionnaire which is used all over the country, as well as through the site visits to VA medical centers by our field service staff, there have been improvements in the examination program. Unfortunately, it got off to a rocky start. However, since that time, there have been improvements in the area of scheduling, and also of notifying the veterans of the results of the examinations. I am not saying that we still don't get complaints, but can say that we have received many remarks as to the improvements in the program.

Mr. STUMP. Thank you.

Are there other comments?

Mr. CURRIER. Our field staff has echoed the observations presented by Mr. Sommer that there have been distinctive improvements. However, as stated in our testimony, there is a lot of problem with fellows who just can't afford to take time off to go in for the exam.

Through the efforts of some of these State organizations and State agent orange committees, some Governors have offered to give time off to State employees. Unfortunately, the private sector has yet to bring this to their own employees. We would like to see a greater availability of the Veterans' Administration facilities to those veterans who necessarily cannot take the time off from their day-to-day work schedule.

In some States we asked why they just don't take the time off anyway, and they said that nowadays you can't afford to miss a day from work because you don't know if it will be there when you go back.

Mr. STUMP. Thank you.

Mr. MAYO. Our experience has been similar in the field, Mr. Chairman. It is not so much not wanting to do so much, it is more the inability to resolve the problems that the veterans have in their own minds. We suggest in our statement the need for some more comprehensive plan insofar as genetic counseling. We think this would be very beneficial.

Mr. STUMP. Thank you.

Mrs. Heckler.

Mrs. HECKLER. Thank you, Mr. Chairman.

I would like to know how many, Mr. Sommer or Mr. Currier, States where VA hospitals conduct the agent orange examination during bankers hours and how many have more flexible medical schedules?

Mr. SOMMER. Mrs. Heckler, I can't give you a concrete figure on that, but I know there have been some changes in scheduling, such as scheduling examinations on the weekends so that those Vietnam veterans who have to work during the week can come in and receive the examination. I know of several instances in which this has taken place. The local VA facility has seen fit to reschedule the examinations so that they could take care of those veterans who couldn't get in during the normal workweek.

Mrs. HECKLER. Do you know how many veterans have received notification that they have been subjected to agent orange? How many have been notified that, as a result of the medical examination, they have been exposed and would be entitled to benefits?

Mr. SOMMER. Are you talking about claims for Veterans' Administration compensation? I am not aware of that figure.

Mrs. HECKLER. Would any of the others on the panel know?

Mr. CURRIER. At the present time, if I understand your question correctly, I know from our experience of no individuals who have specifically received compensation based on exposure to agent orange.

However, Mrs. Heckler, there are a lot of benefits being derived from having the examination by itself because, as one of the previous testimonies here have indicated, there have been some topical skin disorders related to Vietnam, as well as diagnosis made of post-traumatic stress disorders for some of these individuals who, but for the agent orange exam, might not have come forward. As a result of that, a lot of lives were put back in order because of opportunities under vocational rehabilitation. There is a lot of benefit and merit to these exams.

As to your question about bankers hours, we would be happy to canvass our field representatives and come up with some specific numbers, if you would like.

Mrs. HECKLER. I would like to know that. I especially would like to know the Massachusetts record on this subject.

Mr. MAYO. Where there are problems, as far as I know, Mrs. Heckler, we work in the States to resolve them and at that level, as I indicated in my statement. That is our purpose.

Mrs. HECKLER. Many of you heard the testimony of the witness from the Veterans' Administration on the statistical evidence of chloracne among those who were examined. According to the figures presented before the committee, the number of cases was incredibly small, just 12 or 13 out of 96,000. It is an incredibly small number, considering the amount of discussion of chloracne and the prevalence of that complaint of that problem among Vietnam veterans.

Does the statement presented by the Veterans' Administration contradict any testimony that you have received from your own experiences, data or contacts within your own veterans organizations? Are you shocked by that figure?

Mr. SOMMER. I might say that I am quite surprised in seeing those figures. We would have thought that it would be a much higher figure. Having been a medic in Vietnam myself, I am aware of a high incidence of all types of skin conditions. Of course, at the infantry platoon level, we couldn't diagnose them. But that does seem to be an unusually small number of chloracne cases.

Mr. DASCHLE. Would the gentlewoman yield?

Mrs. HECKLER. Yes, I would be happy to yield.

Mr. DASCHLE. I think there was some confusion there. I would like to ask unanimous consent to follow up with some written questions of the VA. It is my understanding that the Registry shows that 20 percent, about 19,200, of those examined had skin diseases. So there is a question here of what is a skin disease and what is chloracne.

Mrs. HECKLER. I see. The definition of chloracne could be the limiting factor. In fact, skin diseases could be more prevalent.

Mr. DASCHLE. There is also the question of out of the 96,000, how many were examined. These are things I would like to follow up with written questions. if we could.

Mr. STUMP. Without objection, so ordered.[1]

Mrs. HECKLER. I have one final question, if I might, for Mr. Mayo. You have expressed the same sense of frustration that I feel. Having really worked on this problem for 5 years since the law was passed, I expected more progress in terms of the examination of the tissue. I am more than unhappy at the lack of forward motion and strong commitment to the resolution of the problem, because the problem continues to disturb many, many who served the country. It seems to be just one that has been put on the back burner, despite our rhetoric.

You suggested a legislative solution here that perhaps it is time for the Congress to do something more. What did you have in mind?

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[1] See p. 160.

Mr. MAYO. If the Congress would introduce legislation—we have considered asking that it be done ourselves—in this connection, we would seriously consider supporting it. Our recent convention had a relatively emotional dialog with reference to this issue, and it was very, very clear that if a legislative initiative came forward, we might well support it, where some sort of presumption would be established and more definitive action would be taken on this issue.

Mrs. HECKLER. What type of legislative initiative was the VFW thinking of.

Mr. MAYO. One discussion was concerning the bill that Mr. Daschle has introduced. I haven't gone through it line for line and analyzed it as yet, nor has our legislative staff. However, a measure along that line is certainly not out of order, insofar as the delegates at our convention felt.

Mrs. HECKLER. I share those sentiments.

Thank you.

Mr. STUMP. Mr. Daschle.

Mr. DASCHLE. Mr. Chairman, I would ask unanimous consent, as well, to insert in the record some information we received from the New Jersey Agent Orange Commission. They couldn't testify, but they wanted this in the record.[1]

Mr. STUMP. Without objection, it will be made part of the record.

Mr. DASCHLE. The only question I have is along the same lines as Mrs. Heckler's last question. How do you feel about my proposal that the VA decide on the final exposure criteria in the next week, given the fact that it has been months and months in the making and, second, begin a pilot study within 30 days or else turn the entire project over to the Center for Disease Control? If you could just give me a quick comment on that. That is the only question I have.

Mr. MAYO. If I may, I don't know that I could subscribe to that at the moment. I would have to analyze the proposal with our Veterans Service staff in our organization and see how they felt about something like that. I can say we feel strongly about this issue.

Mr. SOMMER. I can say that the American Legion also feels strongly about the need for timeliness. As I mentioned previously, we feel that time is of the essence. We feel that the decisionmaking process needs to be stepped up, that the time lags need to be eliminated, and we hope that the pilot study will begin very quickly.

Mr. DASCHLE. So you support it this proposal?

Mr. SOMMER. Not having had the opportunity to review it, I couldn't say that the American Legion would support such a proposal. We do urge that the Veterans' Administration speed up the process at this point in time.

Mr. CURRIER. Mr. Daschle, I would like to say that we would have to echo the sentiments of the American Legion and the VFW as far as the timeframe. We would like to see, if I can draw back on that phrase again, ideally speaking, everybody locked in that proverbial room and come out of it with a solution. We feel that the issue has lingered on much too long, and that there is a lot of work that needs to be done. We feel the mechanism is there right now, presently.

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[1] See p. 119.

But as to official support on your legislation, I would like to have the opportunity to take it to our legislative staff and respond.

Mr. DASCHLE. Thank you all.

Mr. STUMP. Thank you, gentlemen.

Mr. McEwen also has a statement to be made part of the record. Without objection, so ordered.

[The statement of Mr. McEwen appears on p. 63.]

Mr. STUMP. Our last panel is Mr. Terzano, Mr. Platt, and Mr. Milford, please.

Gentlemen, your statements will be made part of the record in their entirety. If you would care to summarize, we would appreciate it.

STATEMENTS OF JOHN TERZANO, LEGISLATIVE DIRECTOR, VIETNAM VETERANS OF AMERICA; LESLIE PLATT, SPECIAL COUNSEL, VIETNAM VETERANS OF AMERICA; AND LEWIS M. MILFORD, NATIONAL VETERANS LAW CENTER, WASHINGTON, D.C.

STATEMENT OF LEWIS MILFORD

Mr. MILFORD. Mr. Chairman, my name is Lewis Milford. I am a lawyer with the National Veterans Law Center, and I am also on the faculty of the Washington College of Law of American University here in Washington.

Before I make some comments specifically on the study, I would like to put to rest a fairly serious allegation that was made by the VA today about the delays in this study. The VA has accused the Law Center and its litigation of delaying the study. I wish I could take responsibility for putting a stop to this disaster but that, unfortunately, is not true.

Two and a half years ago, we filed a lawsuit to stop the VA from doing the study. We talked to scientists from Harvard, Columbia University, and the American Cancer Society. They said that the VA's request for proposal that was sent out in early 1980 would inevitably produce a poor protocol that would not produce a good study. Unfortunately we lost in court on that argument. The court refused to enjoin the VA from going forward with that study.

I should point out also that, 2 weeks after we filed that lawsuit, we wrote a letter to the VA, and we said that the main problem with the study is that the VA had refused to permit the outside participation of veterans and scientists. We said that we would drop that lawsuit, drop it completely, if the VA would simply permit the outside participation of other experts and veterans. The VA wrote us and said, "We don't need any outside participation, we don't need any other help, and we will simply go forward." That is the beginning of our involvement in the study.

Therefore, the VA was under no legal obligation, there was absolutely no legal barrier to go forward with the study while the General Accounting Office was reviewing these violations. The VA has said in the past that the Justice Department told it somehow that it could not go forward. I submit to you that if the VA was interested in going forward with the study, it would have obtained a legal opinion in writing from the Justice Department that said they could not go forward. I have yet to see that. I submit that they could have gone forward at any time.

I would like to make a few comments on recommendations about what should happen now with the study. Before the study began, there were principally four questions that faced the Government and faced the public about agent orange. They were: Who was exposed? Can a study be done at all? Who would do it? How much science would be enough to make decisions on compensation? Unfortunately, almost 3 years later, none of those questions have been answered. They still remain open questions today, as evidenced by the Government's testimony.

We would suggest first that the VA be relieved of all responsibility for the study, and that a more competent body of the Federal Government be responsible for the conduct of it, perhaps the Center for Disease Control, perhaps the National Institutes of Science.

Second, we think also that it is very important, it is obvious from today's testimony, that time limits be placed on any scientific efforts. I think Mr. Daschle's proposal about the pilot study, about the conduct of an exposure index and the preparation of an exposure index are absolutely essential, otherwise we are going to find ourselves seven hearings later asking the same questions and getting no answers.

Third, I think it is absolutely essential—again this is in Mr. Daschle's proposed legislation—to force the VA at this time to explain the standards for compensation. The VA now has a compensation policy. That compensation policy is that all claims are denied on the basis of agent orange. That is based, I presume, on some interpretation of the scientific evidence. The public and veterans have a right to know the basis for their position on that scientific evidence. It is only through public hearings, public participation on those standards, that the public and veterans will have any trust that these standards are fair.

Fourth, the Australian case has been mentioned, I think it is important to point out that in the last VA Advisory Committee meeting, the Minister from Australia said that more than 70 percent of veterans from Australia have had their claims granted on the basis of agent orange. The reason for that is that the Australian system contains an element of fairness that is missing in the VA system. In the Australian system, the government has the burden of disproving that a health problem was caused by agent orange. In this case, we have hundreds of thousands of veterans who are forced, without legal counsel, without any scientific assistance, to prove that their health problems are connected to agent orange. That is an impossible burden, and it is only when that burden is shifted that we will have some sense of fairness on this issue.

I would be glad to answer questions. That is the end of my statement.

Thank you.

[The prepared statement of Mr. Milford appears on p. 104.]

Mr. MONTGOMERY. Mr. Terzano.

STATEMENT OF JOHN TERZANO

Mr. TERZANO. Thank you, Mr. Chairman.

I am John Terzano, legislative director of the Vietnam Veterans of America. With me is Mr. Leslie Platt, special counsel. He served as counsel to and staff director of the original Interagency Work Group and the current Agent Orange Working Group until he left Government service.

We believe Congress took a very important step in enacting Public Law 97-72 to recognize that many Vietnam veterans may be suffering health problems as an unfortunate legacy of Vietnam service. It has been almost a year since this provision was enacted into law. Today, too many Vietnam veterans are apparently still being treated by VA facilities as if the law were not on the books. This cannot be permitted to continue, and we urge the Veterans' Administration to immediately bring all of its facilities and personnel into compliance and, more importantly, to establish an independent monitor of its performance.

Regarding the agent orange research, Vietnam Veterans of America has repeatedly stated its support for the original Interagency Work Group and the current Agent Orange Working Group. There is no doubt that the work group has made substantial progress since its inception in early 1980. It was established to take a lead in developing, overseeing and conducting a comprehensive Federal research program. Its charter expressly charges it with leadership responsibility.

Its seemingly endless delays in starting the VA's epidemiological study, the difficulties over allowing the Defense Department's verification of the methodology of selecting ground troops for study—even though the DOD has been ready to do so for some time—and the continuing lack of an epidemiologist at the VA are evidence that the work group has recently been faced with serious obstacles. The work group has clear responsibility to overcome those obstacles. The Vietnam Veterans of America believes this responsibility can be met.

To assure its achievement, VVA recommends that the committee ask the work group to do several things. First, it should be asked to prepare a detailed report of overall progress made under, and the status of research regarding, each of the elements of its interim research agenda.

The work group also should update the status report of scientific knowledge about agent orange made public in 1980.

Third, VVA believes the work group should hold a public meeting. The first and only public meeting of the work group was held in September 1980. The time has come for another.

Fourth, the work group should resume the regular issuance of comprehensive progress reports.

Fifth, the work group should develop, with active VA participation, a concrete specific timetable for each stage of the VA's epidemiological study. In this regard, VVA stands ready to help marshal the necessary grassroots support among veterans for their participation when the study actually gets underway.

Mr. Chairman, when the work group began, it assumed an enormous burden. It cannot and it must not allow the VA or any agency to impose bureaucratic obstacles which frustrate the completion of its mission.

Mr. Leslie Platt now has some comments on the social policy questions that are before us.

[The prepared statement of Mr. Terzano appears on p. 106.]

Mr. STUMP. Mr. Platt.

STATEMENT OF LESLIE PLATT

Mr. PLATT. Thank you, Mr. Chairman.

I would like to comment briefly on a matter that was raised in this morning's testimony regarding signals to the Defense Department in connection with its beginning the verification process of the methodology for determining the study population for the VA's epidemiological study.

In that regard, we all know that it is not normal practice for the Defense Department unilaterally to begin a major undertaking that has taken months of preparation. I think that the general consensus is that did not happen in this instance either. Indeed, the Defense Department appears to have had a clear understanding from the spring's deliberations with the Interagency Agent Orange Work Group that there was a signal to go forward. It was a binary signal, a yes/no.

The Defense Department officials clearly had the sense that they had the binary signal stated as a yes and, on July 1, they began that effort. Two weeks later, someone pulled the plug and the decision was made that the binary signal was a no. There remains to be explained exactly why there was a misinterpretation as to whether that signal had initially been a yes. But it appears clear from the record that the Defense Department had a reasonable basis on which at least to assume that it had the go signal as they had been ready to go for some time.

More broadly, Mr. Chairman, I would like briefly to point out that Vietnam Veterans of America believes that several key points must be kept in mind in any discussion of agent orange policy. First, even at maximum speed, the research program will take a number of years before reaching completion.

Second, in February 1980, the original Chair of the original Interagency Work Group, then General Counsel of HHS, Joan Z. Bernstein, testified before this committee, and stated in part, and I quote:

> I believe * * * even the best effort of which our scientists are capable may not produce such conclusive results. In short, we may be left, after the research is done, with many of the same social policy issues we face today. Nevertheless, we believe the research being carried out or planned is important and valuable. We hope it will help all of us formulate a fair and humane social policy.

Mr. Chairman, it is now 2½ years since that statement of fundamental realities. The Vietnam Veterans of America strongly believes that the Congress should move forward now consistent with those realities. Substantial time does in fact remain before all necessary and desirable research is completed and results are available, and there are clear limits to the potential of science to provide incontrovertible answers to this issue. But there also is a concomitant need and a responsibility for policymakers to act expeditiously and appropriately in those areas where the scientific community has provided enough information on which to make reasonable policy judgments.

Accordingly, the Vietnam Veterans of America recommends three congressional actions as appropriate, fair, and humane public policy at this time. First, chloracne and soft tissue sarcoma should be statutorily recognized as presumptively service connected in Vietnam veterans.

Second, we urge the Congress to create a temporary compensation program for veterans suffering significant adverse health effects which the VA Administrator finds, after consultation with an advisory committee of outside scientists and veterans representatives, may reasonably be presumed to have resulted from Vietnam service. This temporary program would remain in effect until more complete and definitive research results are in. It would be expressly stated that eligibility is on the basis of a temporary presumption in favor of the veteran. This approach would follow the broader action of the Government of Australia where the burden of proof is shifted from the veteran to the Government and is consistent with the Congress action in Public Law 97-72.

Third, VVA believes the Congress should pass legislation along the lines of the provision considered and passed by the Senate last year to establish a statutory framework for the permanent settlement of compensation claims based on exposure to agent orange.

In closing, we would like to compliment the work group for its continued commitment; Dr. Vernon Houk, Chairman of the Science Panel; the Army's Agent Orange Task Force under the leadership of Mr. Richard Christian; the Department of the Air Force Ranch Hand Study Team; the Department of Defense Health Affairs staff, and in particular Dr. Bricker and Captain Flynn; Dr. Barclay Shepard and his staff at the VA who have consistently pushed for progress at that agency. They are all expressly deserving of thanks and appreciation. Likewise, this committee and this staff have earned the gratitude of Vietnam veterans.

Mr. Chairman, all of the witnesses today have talked about an important issue involving the interaction of science, politics and responsibility. America's Vietnam veterans have borne their responsibility. The ball is now in the Government's court to do likewise by pursuing a thorough research program to completion and by taking action for veterans when and as it becomes appropriate to do so. It is important that the ball not be dropped—or worse, lost—or it may soon be too late for the Federal Government either to keep the trust of America's Vietnam veterans and their families or to warrant it.

Thank you.

[The prepared statement of Mr. Platt appears on p. 106.]

Mr. STUMP. Mrs. Heckler?

Mrs. HECKLER. I would just like to say that the panel has been excellent. I would like to say that I certainly agree with the statements, particularly of the last speaker. I honestly feel that, even after the most indepth examination of the issue, the public policy questions will remain and be very complicated. But, in my judgment, the responsibility of the Government to the Vietnam veteran will still be the paramount concern.

I feel at this point a temporary resolution in favor of the veteran, following perhaps the Australian example cited by Mr. Milford, indeed is the just solution at this time. To simply study the issue and design even the most complicated protocol that would be scien-

tifically correct is to postpone decisions endlessly. I feel that, indeed, these studies must continue. I believe that the Vietnam veterans have suffered with this problem long enough to have those with certifiable symptoms attributable to the exposure to agent orange given the benefit of the doubt, and I think benefits should be made available. It has been a fairly extensive study. I would also say the soft tissue sarcoma victims should receive them as well.

I would rather see the Government meets its obligation for Vietnam veterans directly in that way, having waited for so long, than to simply wait again maybe for another decade until the complications are greater so that we will never untangle the environmental and medical health problems of the veteran sufficiently to perhaps pay any compensation at all.

Mr. Platt, I offer you an invitation to my office to draft legislation along the lines you have suggested because that is the outline of what has been in my own mind.

Mr. PLATT. Thank you very much, Mrs. Heckler.

Mr. STUMP. Mr. Daschle.

Mr. DASCHLE. Mr. Chairman, I have no questions. I just commend all three gentleman for their excellent statements. It is too bad the full committee couldn't be hearing what they had to tell us this morning. I think they have been in the forefront on this issue for a long period of time, and it is certainly to their credit and to the credit of a lot of veterans around the country for them to have been as persistent as they have and that we have come this far. I thank you and thank them for their time.

Mr. STUMP. Thank you, gentlemen, for your very fine testimony. We appreciate your patience, and for all the rest of the members of this committee, for all of the votes that we have had.

Let me apologize very briefly for the Chairman. He is involved on the floor of the House right now with the HUD/VA appropriation bill. He felt that it was probably more important that he be there at this time.

The record will be kept open for those members who may wish to submit questions to the panel for five days and, if you would respond, it will be made part of the record.

Mr. STUMP. Does staff have any questions?

Mr. MCDONELL. No, Mr. Chairman.

Mr. STUMP. Thank you.

The meeting stands adjourned.

[Whereupon, at 1:30 p.m., the subcommittee was adjourned.]

APPENDIX

Prepared Statement of Hon. Bob McEwen

We meet again today to consider the current status of matters concerned with Agent Orange and with matters concerned with the Veterans Readjustment Counseling Program. Both subjects have been of intense interest to this Committee, Mr. Chairman, and I express my appreciation to you for scheduling these hearings.

Agent Orange problems may be destined to be with us for a considerable time. This is so because questions connected with the subject are many and varied and at this point in time largely not subject to scientific answer.

There are those, Mr. Chairman, who desire quick answers to the complex questions concerning Agent Orange. I share their desire but I also want the answers to be as scientifically correct as possible. As I say this, I also want to point out that it is perfectly natural and completely understandable that those who want good answers in the quickest way possible are those veterans who were exposed to Agent Orange and, of course, their wives and children. I join with these individuals in urging all deliberate speed with respect to every type of Agent Orange inquiry in which our government is engaged and I trust that our hearing this morning will give us an informed update which will show as conclusively as is possible that everything that can be done is being done. I trust also that if Congressional assistance is needed in any way that recommendations will be spelled out to our Committee so that we can expeditiously act upon them.

Mr. Chairman, we all share a legitimate concern for those veterans of the Vietnam Era who have experienced difficulties of readjustment following return to civil life. It was for that reason that we extended the Readjustment Counseling Program. I am interested in being brought up to date on how the program is working, if the bugs in it have been worked out, and what needs to be done to improve it. It has been my feeling that substantial improvements have recently taken place and I am anxious to hear about them.

Thank you, Mr. Chairman.

Prepared Statement of Bart Kull

Mr. Chairman and members of the subcommittee, I am Bart Kull, Special Assistant to the Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services, and alternate Chair of the Agent Orange Working Group of the Cabinet Council on Human Resources.

I am pleased to have this opportunity to appear before the Subcommittee on Oversight and Investigations to report on the activities of the Agent Orange Working Group.

I am accompanied today by Dr. Vernon Houk, Acting Director of the Center for Environmental Health of the Centers for Disease Control who chairs the Working Group's Science Panel.

As you are doubtless aware, the Agent Orange Working Group is an expansion and continuation of the Interagency Work Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants (IWG). The IWG was chartered by the White House in late 1979 and held its first meeting in February, 1980. Meetings of both the Working Group and its Science Panel have been held regularly since that time.

As originally structured, the Working Group was comprised of three agencies—the Department of Health and Human Services; Department of Defense and the Veterans Administration—as full members. The Department of Health and Human Services was designated the lead agency, and the Departments of Agriculture and Labor, the Environmental Protection Agency and the Congressional Office of Technology Assessment fully participated as observers. The General Accounting Office

has been kept abreast of developments. Additionally, the White House Office of Science and Technology Policy participated as an ex-officio member.

When this Administration assumed office, the excellent work of the Interagency Work Group was reviewed and a decision was made by the President to upgrade its visibility, to encourage accelerated development of research, and to broaden the availability of resources and personnel. In July, 1981, President Reagan announced that he was re-establishing and expanding the Working Group, renaming it the Agent Orange Working Group, and raising its status to Cabinet Council working group level.

As such, the Working Group reports to the White House Cabinet Council on Human Resources which is chaired by Secretary of Health and Human Services Richard Schweiker. This action clearly reflects the President's commitment as well as that of Secretary Schweiker to the goals of the Working Group and accords the highest priority to its mission. I would like to offer for the record a copy of Secretary Schweiker's August 21, 1981, memorandum which formally re-established the Working Group (Attachment A).

Under its new charter, the Department of Health and Human Services continues as the lead agency with full participation by the Veterans Administration and the Department of Defense. In addition, the Departments of Agriculture and Labor and the Environmental Protection Agency were also designated as full members as were the ACTION Agency, the Office of Management and Budget, the Council of Economic Advisors, and the White House Office of Science and Technology Policy and Office of Policy Development. The Congressional Office of Technology Assessment continues as an observer.

Because of the increasing need of members to establish enhanced communications with other nations of the world involved in similar research, Secretary Schweiker extended an invitation to the Department of State to assume membership of the Working Group. The invitation was readily accepted, and since May 15, 1982, the Department of State has been a participating member.

The Working Group does not itself conduct any research, but is charged with being the overall monitor, coordinator, and information clearing house for the Federal research activities seeking conclusions about the possible health effects of exposure to phenoxy herbicides with an emphasis on Agent Orange. The working group is advised by a panel of knowledgeable scientists from the participating government agencies.

Mr. Chairman, I believe the Administration, the Congress, this committee, members of the Working Group and veterans share a common commitment and goal. As I testified before the Senate Veterans Affairs Committee last November, the concerns of possible long term adverse health effects as a result of exposure to Agent Orange are very real. They demand answers. They demand the kind of deliberate, objective research that will provide those answers. We share a responsibility to turn aside demands for quick and easy answers based on assumptions rather than facts. We also share a responsibility to turn aside from any interests that might seek to sweep this issue under the rug or unnecessarily delay its resolution. We seek the truth of this matter and to reveal openly as much truth as can be found.

I can assure you that a great deal of "seeking" is being done. I am pleased to report to you that those efforts show promise of bearing fruit in the foreseeable future.

For example: The Centers for Disease Control's Birth Defects Study is collecting data on 7,500 case families in the Atlanta area who have given birth to children with major structural malformations. A control group of 3,000 case families who have given birth to structurally normal children during the same time period has been gathered. The children of those who served in Vietnam will be identified. If the study demonstrates that Veitnam veterans are at increased risk of fathering a child with birth defects, it must then be determined, if possible, whether the increase is associated with exposure to Agent Orange or with some other factor. The CDC expects to report out preliminary results of that study by late Fall, 1983.

The Centers for Disease Control's National Institute of Occupational Safety and Health reports steady progress in the development of the Worker Dioxin Registry. The registry will include work and exposure histories of persons engaged in the manufacture of compounds related to 2,4,5-T, the component of Agent Orange containing dioxin. The intent of this registry is to determine whether or not these industrial workers are at greater risk of unusual patterns of illness or death as a result of their association with the chemical. Since 1979, NIOSH has been collecting work histories going back to the 1940's. The preliminary analysis of the early results will occur in late 1983.

The Air Force "Ranch Hand" Study is expected to yield preliminary results in late Fall, 1983. Pilots and other assigned personnel of the code-named "Ranch Hand" aerial spraying project of the Vietnam conflict are participating (approximately 1200 individuals). These men were heavily exposed to Agent Orange. An equal number of matched controls has been selected. In March of 1981, an Advisory Committee was formally chartered to review and oversee the Air Force study of Ranch Hand personnel and to provide technical assistance. The Advisory Committee is composed of experts in environmental medicine, clinical medicine, epidemiology, toxicology, with specific research with dioxin and biostatistics. This Advisory Committee is under the auspices of the Department of Health and Human Services and was established to advise the Secretary and the Chair of the Agent Orange Working Group concerning its oversight of the conduct of this study by the Air Force. The Working Group expects to receive a report from the Advisory Committee this Fall, after their meeting on September 28-29. The Working Group also monitors the study at its monthly meetings with reports from the DOD representative. Generally, the Working Group believes the study is progressing as planned with good participation by subjects. We will defer to the Air Force Deputy Surgeon General, Major General Chesney, who will inform the committee about the current status of this study.

Two Veterans Administration studies are scheduled for completion in the relative near-term.

The Vietnam Veterans Mortality Study will analyze the cause of death among Vietnam veterans since the conflict in an effort to determine if they have been subject to unusual patterns of illness as cause of death. This is a "Vietnam experience" type of study and, as such, is not limited to Agent Orange. The VA advises us that a final report is expected in July of 1984.

Additionally, the Veterans Administration is developing the protocol for a unique study known as the "Twins Study." It will utilize approximately 450 to 500 identical twins . . . one of whom served in Vietnam, the other of whom did not. Again, this is a "Vietnam experience" study that will probe the more subtle health differences that may become evident because of the fact of service and non-service in Vietnam. Again, initial results are expected in mid-1984.

Of considerably longer duration will be the massive Veterans Administration, Congressionally mandated, Epidemiology Study. The Veterans Administration has advised the Agent Orange Working Group that a final review of the protocol is being completed by the National Academy of Sciences; and, requests for proposals to conduct the pilot phase are due to be sent out shortly. Subsequently, a contract or contracts for the pilot study will be awarded. We have been advised by the Veterans Administration that completion of the pilot phase is anticipated by December, 1984 with the projected completion of the bulk of the main study slated for the end of 1987. The Veterans Administration has reported to the Agent Orange Working Group that it has budgeted $12.6 million dollars for the fiscal years 1982-84 for the financing of the Epidemiology study.

The Army Agent Orange Task Force and the Science Panel of the Agent Orange Working Group are devising the means to provide appropriate individuals for use in this important research effort.

For the information of the subcommittee, I am submitting a brief fact sheet of the various research activities completed and underway in the Federal sector (Attachment B).

One final note which does not pertain to specific Federal research, but which is of importance to the Working Group:

During the past several months, a number of State legislatures have enacted legislation . . . or are preparing to do so . . . which addresses the concerns of Vietnam veterans in the area of herbicide exposure and health effects. I have had the opportunity to appear before State Agent Orange Commissions including those of New York, New Jersey, Pennsylvania and have most recently met with a delegation of commission members from Illinois. A positive cooperative relationship between Federal efforts and those of the States is being established. Along with the sharing of information between the States and Federal Government, we have encouraged the various states to form an interstate informational structure. I am advised that this is currently being undertaken.

The Agent Orange Working Group's Public Affairs arm provides the news media, veterans publications and other interested parties with information concerning its progress on an ongoing basis.

In summary, we are generally encouraged with the progress of substantive research which is going forward with the coordination and oversight of the Agent Orange Working Group. The prospects for relatively near-future results in some

areas are promising. The attitude of research administrators and policy personnel of the Working Group toward the critical importance of this matter to veterans and their families is positive. Our relationship with the Congress, State Commissions, Veterans Organizations and individual veterans is cooperative. Our shared sense, both of urgency and of the requirement for valid research effort is, I am convinced, present.

We will continue to avoid any pre-judgement of the outcome of research. Our task is to provide the Administration and Congress with objective information upon which enlightened public policy decisions can be formed.

That is the job assigned . . . and that is the job being performed.

Thank you, Mr. Chairman and members of the Subcommittee. We will be happy to respond to your questions.

[Attachment A]

THE WHITE HOUSE,
Washington, D.C., August 21, 1981.

Memorandum for: Secretary of Defense, Secretary of Agriculture, Secretary of Labor, Director, Office of Management and Budget, Assistant to the President for Policy Development, Chairman, Council of Economic Advisers, Director of Action, Administrator, Environmental Protection Agency, Administrator of Veterans' Affairs, Director, Office of Science and Technology Policy.

From: Secretary Richard Schweicker, Chairman Pro-Tem, Cabinet Council on Human Resources.

Subject: Agent Orange Working Group.

The Administration has reviewed the excellent work of the Interagency Work Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants and believes that it has made significant progress toward fulfilling its important mandate. By bringing together knowledgeable scientists from the various Federal departments and agencies the Work Group has identified ongoing research activities on phenoxy herbicides and contaminants and begun to develop and organize the means to carry out additional needed scientific research.

President Reagan shares the widespread public and congressional concern over possible adverse health effects among Vietnam veterans exposed to Agent Orange and other substances. The President stated, during his meeting with national veterans organization leaders at the White House on July 17, 1981, that the Administration is giving special consideration to those concerns of Vietnam veterans.

At the White House meeting, the President announced that the administration had re-established an expanded Working Group as the Agent Orange Working Group and raised its status to Cabinet Council level. The President is personally determined to assure that the full resources of the Federal government are available to support the Working Group's continuing efforts. The decision to re-establish and expand the membership of the Working Group and to make it an integral part of the Cabinet Council on Human Resources reflects the President's commitment and accords the highest priority to its mission.

As Chairman Pro-Tem of the Cabinet Council on Human Resources, I am, accordingly, reaffirming by this memorandum the Agent Orange Working Group's mandate of December 11, 1979 and providing specific guidance as to how that mandate is to be carried out in accordance with the Cabinet Council's decisions.

The Department of Health and Human Services shall continue to have lead responsibility for overall direction and management of the Agent Orange Working Group. The Secretary of Defense and the Administrator of Veterans Affairs shall continue to assure that their respective agencies participate fully in all Working Group activities. The Departments of Agriculture and Labor and the Environmental Protection Agency, each of which have until now been observers, shall assume full membership and their respective agency heads shall assure that those agencies participate fully in all Work Group activities.

In addition, ACTION, the Office of Management and Budget, and the Council of Economic Advisers, as well as the White House Office of Science and Technology Policy and the Office of Policy Development, shall assume membership on the Working Group and the heads of those agencies and offices shall assure that the resources of their respective agency or office are fully available to support it.

Also, the congressional Office of Technology Assessment, which has been actively involved in all Working Group activities as an observer, will be invited to continue to participate in that capacity, and the General Accounting Office, which has been extremely helpful to the Working Group in the past, will continue to be kept abreast of developments and invited to advise and assist as appropriate.

The Working Group has initiated research efforts designed to find answers to many of the questions surrounding Agent Orange that have been raised. These efforts include the birth defects study being conducted by HHS' Centers for Disease Control, the Ranch Hand Study being conducted by the Air Force, the epidemiological study being planned by the Veterans Administration pursuant to Public Law 96-151, and the compilation by HHS' National Institute of Occupational Safety and Health of a national registry of workers exposed to dioxins. Each of these research activities, as well as the other important research activities being conducted under the overall guidance of the Working Group, are to be continued without interruption or delay.

The Working Group has developed an impressive record of scientific objectivity, impartiality and integrity and it is imperative to the success of the Working Group effort that this record and the Group's credibility be maintained. In this regard, regular progress reports to the Cabinet Council, the Congress and the public will continue to be made by the Agent Orange Working Group.

To assure effective leadership of the Working Group, I am hereby appointing James Stockdale, HHS Deputy Under Secretary for Intergovernmental Affairs, as Chair. Also, I am appointing Dr. Vernon N. Houk of the Center for Environmental Health of the Centers for Disease Control as Chair of the Working Group's Science Panel. In addition, I am appointing HHS Legal Counsel Leslie A. Platt, who has served as legal adviser to and staff director of the Working Group since its inception, to continue in those capacities. I know and believe you will find that these individuals share my commitment to carrying out this important mission.

Please review your representation on the Working Group to assure that your agency or office is adequately represented by appropriate technical experts, scientists and policy-level officials. In order to facilitate the Group's effectiveness, it is of course important that each agency's total membership be limited.

The first meeting of the full Working Group has been scheduled for Friday, August 28, 1981 and a meeting of the Science Panel will be scheduled for shortly thereafter. Accordingly, please let Mr. Bart Kull, Special Assistant to the Deputy Under Secretary for Intergovernmental Affairs (245-6156), or Dr. Peter Beach, HHS Director of Veterans Affairs (245-2210), know as soon as possible the name(s) of your designated representative(s) so that briefing materials may be forwarded to them.

Attached for your information is a copy of the memorandum of the Executive Secretary to the Cabinet Council on Human Resources establishing the Working Group.

[Attachment B]

DEPARTMENT OF HEALTH & HUMAN SERVICES,
Washington, D.C., July 7, 1982.

Memorandum To: All State Veterans Departments/Agent Orange Commissioners/ Veterans Service Organizations and Coordinators, etc.

The attached Fact Sheet may be helpful to you and your organization. Please circulate to any group you represent.

DR. PETER E. M. BEACH,
Director of Veterans Affairs/HHS,
Staff Director Agent Orange Working Group.

CABINET COUNCIL ON HUMAN RESOURCES, AGENT ORANGE WORKING GROUP (AOWG), FACT SHEET ON SCIENTIFIC RESEARCH OF THE FEDERAL GOVERNMENT

Membership: Department of Health and Human Services (Lead Agency), Department of State, Department of Defense, Department of Agriculture, Department of Labor, Office of Management and Budget, Executive Office of the President, White House Office of Policy Development, Council of Economic Advisors, ACTION, Environmental Protection Agency, Veterans' Administration, White House Office of Science and Technology Policy.

Observer: Congressional Office of Technology Assessment.

AGENCY CONTACTS ON FEDERAL RESEARCH ON AGENT ORANGE

Mr. James S. Stockdale, HHS Deputy Under Secretary for Intergovernmental Affairs (Chair), (202) 245-0409.

Mr. Bart Kull, HHS Alternate Chair and Chair, Public Affairs Panel, (202) 245-6156.

Dr. Vernon Houk, HHS (CDC) Chair, Scientific Panel, (202) 236-4111.

Dr. Peter E. M. Beach, HHS Staff Director, (202) 245-2210.

Mr. Maurice LeVois, Veterans' Administration, (202) 389-2833.

Dr. Peter Flynn, Department of Defense, (202) 697-8973.
Dr. Philip Kearney, Department of Agriculture, (301) 344-3533.
Dr. Donald Barnes, Environmental Protection Agency, (202) 382-2897.

The Fact Sheet of Agent Orange Research was compiled by the Agent Orange Working Group to inform the interested public about current U.S. Federal Government research on phenoxy herbicides and their contaminants. The list describes ongoing research and demonstrates the breadth of research efforts. Interested persons may obtain further information on these studies by contacting the representative, as listed in the Fact Sheet, from each Federal agency conducting research.

This Fact Sheet, describing the forty-six federal studies and research projects completed and underway, is a clear illustration of the time and effort and funding that has been expended in the Federal arena and demonstrates the government's positive effort to seek answers to the Agent Orange question.

The Agent Orange Working Group has the responsibility for overseeing such research and dissemenating information to the public as it becomes available. In light of this mandate, the Working Group has compiled this list. The Working Group will also asssure that research findings are promptly made available to the public as data are gathered and analyses are completed.

DEPARTMENT OF HEALTH AND HUMAN SERVICES (24 STUDIES)

Title: Bioassay of Octachlorodibenzo-p-dioxin.
Results: Terminated due to unavailability of purified chemical.
Title: Carcinogenesis Bioassay of 2,3,7,8-Tetrachlorodibenzo-p-dioxin in Swiss Webster Mice.
Results: This compound found carcinogenic for B6C3P-1 mice and Osborne-Mendel rats producing liver and thyroid tumors.
Title: Carcinogenesis Bioassay of 2,3,7,8-Tetrachlorodibenzo-p-dioxin in Osborne-Mendel Rats and B6C3F1 Mice.
Results: This compound found carcinogenic for Swiss-Webster female mice producing tumors of the integument.
Title: Bioassay of a Mixture of 1,2,3,6,7,8- and a Mixture of 1,2,3,6,7,8- Hexachlorodibenzo-p-dioxins for Possible Carcinogenicity.
Results: Under the conditions of this bioassay, HCDD was not considered carcinogenic for Swiss-Webster mice.
HCDD administered by gavage was carcinogenic for Osborne-Mendel rats and B6C3F1 mice producing tumors of the liver.
Title: Comparative Species Evaluation of Chemical Disposition and Metabolism of 2,3,7,8-Tetrachlorodibenzofuran (TCDF) in Rat, Monkey, Guinea Pig and Two Strains of Mice.
Results: The speed of metabolism and excretion correlated inversely with the observed acute toxicity of TCDF in these species.
Title: Neurotoxicity of 2,4-D in Rodents.
Results: Single oral doses of 2,4-D indicate a persisting effect (4-8 weeks) on fore- and hindlimb grip strength in male Fisher rats. Other neurobehavorial tests to measure the effects on sensory and motor functioning, affective behavior, learning, and memory have been undertaken.
Title: Studies of the Chemical Disposition and Metabolism of Octachloridibenzodoxin (OCDD).
Results: Discontinued because chemical could not be purified.
Title: Effects of Agent Orange Components on Male Fertility and Reproduction.
Objective: Sperm number and morphology, mating frequency, fertility efficiency, dominant lethal mutation, incidence of congenital malformations, viability of offspring and sisterchromatid exchanges are being measured in male mice fed large doses of the constituents of "Agent Orange" and will be published soon.
Title: Mutagenicity Studies of TCDD, 2,4-D, 2,4,5-T and Esters of 2,4-D and 2,4,5-T.
Objective: The Ames test for point mutations, Drosophila tests for six-linked recessive mutations and mammalian cell tissue culture tests for chromosomal aberrations are almost complete and have yielded negative results so far.
Title: Implications of Low Level Exposure to Dioxins.
Objective: Two year dietary exposure to 5 and 50 parts-per-trillion TCDD will include clinical and behavorial evaluation of toxicity and fat biopsies to measure TCDD bioaccumulation in rhesus monkeys.
Title: Mechanisms of Toxicity of the Chlorinated-p-dioxins.
Objective: In viro and in vitro metabolism of TCDD and examinations for the presence of receptor sites in different rodent species is in progress.

Title: Research Toward Understanding the Molecular Level Mechanism of Toxicity of TCDD and Related Compounds.

Objective: An ongoing activity to determine the structure and electronic properties of the dioxin receptor in order to understand the mechanisms of toxicity.

Title: Synthesis of Selected Tetrachlorodibenzo-p-dioxins and Related Compounds as Analytical Standards.

Objective: It is anticipated that another year will be necessary to have a minimum set of standards in hand before analytical method development can truly begin.

Title: Dioxin Registry.

Objective: To establish a registry of all workers in the United States who have been associated with the synthesis of 2,4,5-T. The registry will include work and exposure histories for all registrants. The registry will be utilized initially for a retrospective cohort mortality study, and the workers will be followed prospectively. In the future, an evaluation will be made of the registry to determine if the cohorts can be utilized for studies of morbidity and reproductive outcome.

Title: Soft Tissue Sarcoma Investigation.

Objective: To determine the association between occupational exposure to herbicides such as 2,4,5-T and the development of a malignant tumor known as soft tissue sarcoma.

Title: Investigation of Leukemia Cluster in Madison County Kentucky Allegedly Associated with Pentachlorophenal-Treated Ammunition Boxes.

Objective: Effect on human contact.

Title: Matrix Effect and Sub Parts-per-billion Quantitative Analysis of TCDD by Mass Spectrometry—With Special Reference to Milk.

Objective: This project is designed to validate the determination step for TCDD at low parts-per-trillion levels in environmental/biological samples by high resolution gas chromatography and high resolution mass spectrometry.

Title: Toxin Actions of Tetrachloroazobenzene and Dioxins.

Objective: This project is designed to examine the pharmacokinetics and toxicologic, pathologic and biochemical changes with chronic exposure to TCAOB and TCCD using in viro and in vitro methods.

Title: Xenobiotic Induction of Pleiotropic Responses in Liver.

Objective: This project is an attempt to identify potentially toxic substances by their ability to induce certain hepatic enzymes before overt toxic effects are manifest.

Title: Molecular, Biochemical Actions of Chlorinated-p-dioxins.

Objective: This project is designed to investigate biochemical mechanisms of TCDD toxicity in mammals via alterations in fatty acid metabolism.

Title: Molecular Basis of Dioxin Toxicity to Keratinocytes.

Objective: This project is designed to characterize the effects of TCDD on growth and differentiation of human skin cells in tissue culture.

Title: Mechanism(s) for Toxicity of Chlorinated Dibenzo dioxins.

Objective: This project is designed to measure interspecies variation in toxic metabolic and neural response to TCDD.

Title: Establishment and Maintenance of a.. International Register of Persons Exposed to Phenoxy Acid Herbicides and Contaminants.

Objective: An ongoing and long-term project which has begun only recently. Preliminary contacts have been made with key individuals in Nordic countries and Italy and an international meeting will be held in the summer of 1982 to plan further efforts.

Title: Birth defects and Military Service in Vietnam (in conjunction with the VA and DOD).

Objective: To determine whether an unusually high proportion of fathers of babies born with defects served in Vietnam. This comparison will yield an estimate of the risks of siring a child with a defect for Vietnam Veterans relative to the risks for non-Veterans. If they are to be found to be at increased risk, it may be desirable to try to determine if the increase is associated with Agent Orange exposure or with some other factor(s).

DEPARTMENT OF DEFENSE (ONE STUDY AND SUPPORT FOR CDC BIRTH DEFECTS STUDY

Title: Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to "Herbicide Orange."

Objective: To determine whether there are or will be long term health effects attributable to occupational exposure to Herbicide Orange and its contaminant TCDD.

VETERANS' ADMINISTRATION EIGHT STUDIES

Title: Review and Analysis of Literature on Phenoxy Herbicides and Dioxin.

Objective: To comply with the provision of Public Law 96-151, mandating the VA to conduct ". . . a comprehensive review and analysis of the worldwide literature on Agent Orange and other phenoxy herbicides."

Title: Epidemiology of Agent Orange in Vietnam Veterans.

Objective: To comply with the mandated provisions of Public Law 96-151, Section 307, which directs the Administrator of Veterans Affairs to design a protocol for, and conduct an epidemiological study of, Vietnam Veterans who may have been exposed to dioxins contained in herbicides particularly Agent Orange sprayed in Vietnam.

Title: TCDD Assay of Human Fat.

Objective: To determine whether TCDD could be measured in human fat and whether its presence could be used to determine exposure to Agent Orange.

Title: Birth Defects and Military Service in Vietnam (in conjunction with the Centers for Disease Control).

Objective: To determine whether an unusually high proportion of fathers of babies born with defects served in Vietnam. This comparison will yield an estimate of the risk of siring a child with a defect for Vietnam veterans relative to the risk for nonveterans. If they are found to be at increased risk, it may be desirable to try to determine if the increase is associated with Agent Orange exposure or with some other factor(s).

Title: Vietnam Veterans' Mortality Studies.

Objective: To analyze and compare death rates and cause of death profiles of veterans with service in Vietnam and comparable veterans with no service in Vietnam.

Title: Urinary 6-Hydroxy Cortisol: Physiologic and Pharmacologic Studies (including Agent Orange).

Objective: To determine the effects of dioxin on hepatic microsomal enzymes and determine whether altered steroid metabolism can be helpful in assessing any continuing effects of herbicides and TCDD in exposed humans.

Title: Effect of TCDD on Lipid Metabolism.

Objective: To study acute and chronic effects of TCDD on plasma lipids and adipose tissues in animals.

Title: Mechanisms of Dioxin Induced Toxicity Using the Chloracne Model.

Objective: To develop an animal model for dioxin induced chloracne.

DEPARTMENT OF AGRICULTURE (EIGHT STUDIES)

Title: Exposure Survey on Herbicides Including Phenoxys.

Objective: To determine the amount of exposure to 2,4-D and 2,4,5-T in farm and forestry workers under normal use conditions.

Title: Use Survey on Herbicides Including Phenoxys.

Objective: To estimate on a state-by-state basis the use of phenoxy herbicides in crop protection programs.

Title: Survey of Phenoxy Herbicide Literature.

Objective: To maintain an up-to-date bibliography on all literature published on phenoxy herbicides.

Title: Photolysis of 2,4,5-T.

Objective: To measure the rate and products of 2,4,5-T photolysis in water.

Title: Biological and Economic Assessment of 2,4,5-T and Silvex.

Objective: To provide a current biological and economic impact statement on the possible loss of 2,4,5-T and Silvex from American agriculture.

Title: TCDD Residue Monitoring in Deer.

Objective: To determine the levels of TCDD in deer from forest spray programs.

Title: 2,4-D Human Exposure Study.

Objective: To measure the concentration of 2,4-D in two sets of farm workers in the States of Washington and North Dakota.

Title: Participation in Study of Herbicides and Spontaneous Abortions being Conducted by SRI International.

Objective: To assist in the funding of the SRI study aimed primarily at farm and forestry workers.

ENVIRONMENTAL PROTECTION AGENCY (FIVE STUDIES)

Title: Evaluation of Large Scale Combustion Sources.

Objective: To analyze emissions for PCDDs and PCDFs.

Title: Evaluation of Municipal Waste Combustors.

Objective: To analyze emissions for polychlorinated dibenzo-p-dioxins and dibensofurans.

Title: Bacterial Decomposition of TCDD.

Objective: To search to discover bacterial genes which code for the capability to degrade TCDD.

Title: Investigation of Bioavailability to Fresh Water Fish of TCDDs in Fly Ash.

Objective: To determine the bioavailability to fresh water fish of TCDDs in fly ash.

Title: Analysis of Environmental Samples for PCDDs and PCDFs.

Objective: To respond to requests for an analysis of environmental samples from Regional Offices.

PREPARED STATEMENT OF MAJ. GEN. MURPHY A. CHESNEY

Mr. Chairman and Members of the Committee, I am Major General Murphy A. Chesney, Air Force Deputy Surgeon General. I thank you for the opportunity to present an update on the progress of the Air Force Epidemiologic Study of its Ranch Hand personnel exposed to herbicides in Vietnam from 1962–1971. Lieutenant General Paul Myers presented a status report on this study November 18, 1981, before this Committee. I will bring you up-to-date on the progress since that time.

Herbicide Orange was one of several defoliants used during the Vietnam War to deprive the enemy of jungle cover and crops. It consisted of the agricultural herbicides 2,4-D and 2,4,5-T, with its manufacturing contaminant dioxin. Increasing concern in the late 1970s over the potential long-term health effects from exposure to these chemicals led to a commitment by the Air Force to design and implement a comprehensive epidemiologic study of the health of the aircrew members and support personnel involved in the dissemination of the defoliants. This group was selected because their exposures were heavy and frequent, and records were available which permitted identification of the individuals involved.

A study protocol was developed in 1979 for an indepth epidemiological investigation consisting of three integrated elements: (1) a mortality study (death), (2) a morbidity study (disease, including birth defects in offspring), and (3) follow-up. The protocol was subjected to extensive scientific peer review during 1979 and 1980. Final approval for the study was given in the fall of 1980 and work was begun on the study.

The initial mortality phase of the study is nearing completion at this time. As of December 31, 1981, we had 60 Ranch Hand deaths with full documentation for each: 22 killed in action; 18 accidental deaths; 3 suicides; 1 homicide; 2 malignant neoplasm; 1 endocrine, nutritional, metabolic and immunity disorder; 9 disease of the circulatory system and 4 diseases of the digestive system. We have learned this year of 7 more deaths for which we are in process of obtaining additional information. Data collection for this study continues on a daily basis. Although more extensive analyses and comparisons remain to be done, preliminary findings indicate that the overall crude mortality of the Ranch Hand and comparison groups have been very similar. Based on the 60 deaths identified, excluding the 22 killed in action, no statistically significant differences in total death rates have been found between the Ranch Hand group and the comparison group. Both groups appear to have experienced significantly less mortality than a similarly aged U.S. white male population, indicating a healthy worker effect. However, thus far, very few deaths have occurred in the study groups, and these deaths represent only a very early assessment of mortality. The only preliminary interpretation that can be made from these data is that, thus far, the Ranch Hand group has had a mortality experience equivalent to that of an occupationally similar comparison group. Periodic reassessments of the mortality experience of the groups will be made. Definitive conclusions must await the completion of more detailed analyses and the accumulation of a larger number of deaths in the study groups in the coming years.

On September 18, 1981, Louis Harris and Associates were awarded a contract to administer face-to-face, in-home questionnaires to the participants selected for this phase of the study. Of the 2,486 subjects selected for the study, only one Ranch Hand and four comparison subjects could not be located. This location rate of 99.8 percent is very high for epidemiologic studies. Interviews were also planned with the current and former wives of the subjects, and with the next-of-kin of deceased individuals. These interviews began in October 1981, and are still in progress. As of September 1, 1982, 2,334 study subjects, 2,700 current and former spouses, and 75 next-of-kin interviews had been accomplishd.

The participation of the subjects has been very gratifying. Currently, 97 percent (1,159) of the Ranch Hand subjects have chosen to participate in the questionnaire. Three percent (38) have declined to participate in the questionnaire. As expected, comparison subjects have participated at slightly lower rates, with 92 percent (1,145) of the originally selected comparison subjects completing the questionnaire phase of the study. Eighty of originally selected comparison subjects declined and 15 are still to be administered the questionnaire.

The Louis Harris contract has been extended until November 15, to provide questionnaire data on any comparison subjects who make late decisions to participate. The final receipt of data should take place within 30 days after the completion of these contracts. All comparison subjects declining the questionnaire and/or the examination have been or will be replaced with willing subjects, equally well qualified for inclusion in the study. These substitute subjects will all be interviewed and examined in the same manner as the other participants. This circumstance was anticipated in the study design, and provision for the substitution were planned in the early days of the effort. This substitution process will ensure that the largest numerical set of data available for maximum scientific validity.

The physical examination phase of the study is proceeding well. On November 25, 1981, the Kelsey-Seybold Clinic in Houston, Texas, was awared the contract to conduct in-depth physical examinations and psychological evaluation of the participants. The examinations began on January 12, 1982. As of September 1, 1982, 1,645 examinations had been completed on 858 Ranch Hands, 757 primary comparison, and 30 replacement comparison subjects. There are an estimated 680 examination yet to be accomplished. Sixty-six Ranch Hands declined to participate in the examination. There are still 235 Ranch Hands who are either scheduled or who have not yet reached a decision. If these all decline to participate, the final compliance will be 71 percent but could be as high as 90 percent, if all remaining agree to be examined. Of the original comparison group, 61 percent (750) have completed the physical examination; an additional 129 have declined. Two hundred and sixty-two still remain to be scheduled. If all these decline, compliance of the originally selected comparison group in the physical examination will be only 61 percent, but could reach 82 percent if all remaining subjects choose to participate.

The physical examination contract is being negotiated to terminate on or before December 15, in order to accommodate all of the individuals desiring to participate in the study. Each subject will thus be given the maximum opportunity to participate fully in this effort.

One problem due to a computer programing error has arisen since last November, and it has been successfully resolved. Eighteen percent of the comparison subjects initially selected from computerized personnel records for the questionnaire and examination phases of the study were found to be inappropriate for inclusion in the effort. Two hundred eleven of these had already been interviewed and 26 had been examined. All of these individuals were advised of the error and thanked for their assistance. Those who had not already been examined were offered a careful and complete physical examination at Air Force expense at the Air Force medical treatment facility nearest to their home. Other more appropriate subjects were entered into the study in their place. This "over selection" did not affect the scientific validity of the study.

The next nine months will continue to be very active. The contracts should conclude late this fall, and interim technical reports will be issued in early 1983, as promised to this Committee last November. A mortality report will be released in March, and preliminary reports on the data from the questionnaire and examination phases of the study will be available in the April–June time period.

The initial round of questionnaires and physicals will be the basis for the remainder of the study. Follow-up examinations will be a 3, 5, 10, 15 and 20 years.

In summary, this study is preceding only slightly behind schedule. But please note that this is due to the unexpectedly high and favorable participation rates, the eligibility problems and unique logistical and scheduling difficulties encountered in a study of this scope. The Air Force investigators have continued to benefit from the interactions with the Advisory Committee on Special Studies Relating to the Possible Long-Term Effects of Phenoxy Herbicide and Contaminants, and they look forward to continuing this association. Close cooperation with the Veterans Administration in their study efforts will continue, and our investigators will continue their cooperative associations with national and international researchers in attempts to remain abreast of the current scientific work on phenoxy herbicides and dioxins. We will continue to work closely with this Committee, and other interested groups in-

volved in the resolution of the herbicide issue. I will be pleased to answer any questions at this time.

PREPARED STATEMENT OF RICHARD S. CHRISTIAN

Mr. Chairman and members of the Subcommittee on Oversight and investigations; I am Richard S. Christian, Chief of the Army Agent Orange Task Force. With me today is Captain Peter A. Flynn, United States Navy, Medical Corps, Director for Professional Services and Dr. Jerome G. Bricker, Special Assistant for Health Legislation, Office of the Assistant Secretary of Defense for Health Affairs. The Army Agent Orange Task Force was established on May 21, 1980. On April 26, 1982, Secretary of Defense Caspar Weinberger directed the Department of the Army to become the lead Department of Defense agency for the purpose of providing the Veterans Administration with the necessary cohort selection lists and other data.

I wish to thank the Subcommittee for providing us with an opportunity to describe the progress that we have made in retrieving the records relating to Agent Orange which are needed to support the Veterans Administration's health studies, and for other purposes. During the past year, we have substantially expanded our Agent Orange activities.

As a result of this expansion, we believe that the Army's Agent Orange Task Force is ready to respond, promptly and effectively, to research demands and proceed as soon as the necessary decisions have been made by other agencies about the proper scope and character of the health studies into the possible effects of Agent Orange.

Before describing in detail the enhancements we have made in our work on the Agent Orange records, I would like to say a few words about the Vietnam War Collection. This collection contains almost 40,000 linear feet of combat records. The sheer size of these records is both a challenge and an opportunity. On the one hand, the vast bulk of these records makes it difficult and expensive to research their contents. On the other hand, the richness of this collection makes it possible to undertake studies of the movements of combat battalions in areas where Agent Orange may have been sprayed. This would have been difficult or impossible to conduct with respect to any earlier conflict in which the United States was engaged.

However, it is important to remember that the Vietnam War Collection consists of combat records, and they are not always complete. This limitation has to be considered when planning health-related studies on the possible effects of Agent Orange. The Task Force has frequently briefed health researchers concerning the strengths and limitations of our records collection and will be glad to do so in the future.

It is also important to remember that the Vietnam War Collection consists of military records, many of which are impacted by security classification and Privacy Act matters.

In addition, because these are military records, it is frequently difficult for personnel not familar with the military to work with them directly. To the uninitiated, the terminology is strange and unit relationships are sometimes unclear. The Task Force is fortunate in having many former military personnel, including Vietnam veterans, assigned to it. We believe that their knowledge of military operations and of Vietnam itself can be of substantial assistance to health science researchers who may make use of the Vietnam War Collection.

Our Task Force has made substantial strides during the past year in its efforts to improve access to the Vietnam War Collection. In addition, we are aware of the other demands that are likely to be made for records relating to Agent Orange. Among these are discovery notices issued by the courts in connection with Agent Orange litigation, Freedom of Information Act requests from individuals, requests for information from veterans organizations and others. Our goal has been to establish a system that will enable us to promptly and completely respond to requests from these various sources.

Here are some of the steps taken in the past year by the Task Force to facilitate access to records and to support ongoing scientific research on the possible effects of Agent Orange:

(1) The staff of the Task Force has a trained nucleus of eleven full-time researchers. Furthermore, we are authorized to hire additional personnel as needed. We believe that these steps make it possible for us to respond rapidly to requirements that are likely to be imposed on us.

(2) We have developed and implemented a computerized records management system for indexing Agent Orange documents to facilitate retrieval of key records.

We now have over 5,000 Agent Orange and related herbicide records indexed. This automated system will be of substantial assistance to our own staff and will make it possible for us to respond to records requests more promptly than would otherwise be the case.

(3) To facilitate the examination of records collections held by other government agencies, we have taken steps to establish closer liaison with the Department of the Navy and Air Force. As a result, officers from the Navy, Marine Corps and Air Force have now joined the Army's Agent Orange Task Force.

In addition to these liaison activities, the Task Force has made a visit to the Army's Reserve Components and Personnel and Administration Center in St. Louis, Missouri, to investigate the complexities involved in locating personnel who may have been exposed to Agent Orange. Contacts have also been made with the Australian government which has an active Agent Orange program.

(4) The Task Force has drawn up detailed plans for the data retrieval activities that will be required as soon as the responsible agencies decide on the required characteristics of the epidemiological study cohorts to be used in health related studies of the possible long-term effects of Agent Orange. These plans, which take the form of "milestone time tables," outline each of the steps necessary to locate exposed and non-exposed cohorts, and to retrieve the relevant personnel records. I will have more to say about this in a minute.

(5) The basis for the general research plan is the "Department of Defense Exposure Index Model," designed by Dr. Jerome G. Bricker, and submitted to the Science Panel of the White House Agent Orange Working Group on December 4, 1981. The Department of Defense model was subsequently reviewed on December 14, 1981 and January 27, 1982 and was unanimously agreed to by the Science Panel of the White House Agent Orange Working Group. It was determined that the Department of Defense should select the cohorts in accordance with Dr. Bricker's cohort selection paper. This Exposure Index Model was developed as a result of prior ground troop studies and records research conducted by the Task Force which substantiated its feasibility. Subsequent computer analysis proved that the procedures contained in the model were workable and would produce the expected cohorts.

Briefly, the Department of Defense Exposure Index Model is a methodology to identify cohorts for the pending pilot and full epidemiology studies. The selection and records processing of 1,800 veterans for the pilot study will require six months. This population will be divided into three groups of 600 veterans each in the following cohort categories: (1) Vietnam veterans heavily exposed to herbicides, (2) Vietnam veterans not exposed to herbicides, and (3) Vietnam era veterans who did not serve in Vietnam. After completion of the Department of Defense input to the Pilot Study, we believe it is possible to select the cohorts for the full study in about a year to eighteen months. The Department of Defense's input to the full study is envisioned as identifying 36,000 veterans who will be divided into three cohorts of 12,000 each. The first category of approximately 12,000 veterans would constitute a troop population heavily exposed to herbicides while serving in Vietnam. The second category, also of 12,000 veterans, would serve as the non-herbicide exposed Vietnam troop population. The third category of 12,000 would be Vietnam era veterans who did not serve in Vietnam.

I will briefly outline the steps in the "Department of Defense Exposure Index Model" which will provide a list of veterans who can be recruited for the pilot study. The same methodology will be used in the full study. We have at our disposal Vietnam Station Lists, Command Post listings, Strength Reports, Ranch Hand HERBS Tape, and transparent overlays showing Ranch Hand spray tracks. We are constructing a Services HERBS Tape, a compilation of all identified herbicide spray operations and incidents. The tape now contains over one thousand helicopter perimeter spraying missions, other Ranch Hand missions not previously shown on the original HERBS Tape, truck/hand spraying, aborts/dumps, leaks, and other incidents. We would then define the areas with many closely spaced Ranch Hand tracks, perimeter spraying points and areas with few or no tracks. We will select one or more heavily sprayed areas and areas with little or no spraying activity during a two year period. The time frame used will be during the most heavily sprayed years, 1967 through 1968.

A review of the Station and Command Post lists will determine potential units which were operating throughout all of the same area during most of the two year period.

The next step will be to determine the availability and completeness of eligible units' records of troop movements. There are many different types of records that we will use. Two key collections are the unit Daily Journals and Situation Reports.

The data in these records contain the daily movements of rifle companies by grid coordinates.

The next step will be to computerize the daily locations for selected units. We will then match the unit locations with the Ranch Hand and Services HERBS Tape to obtain the number and type of "Hits" for Agents Orange, White and Blue. By a "Hit", it is meant that the unit was in the spray area on day one, two or three following a spray mission or the unit was exposed to a perimeter or other spraying on a given date.

Once the units are selected, the next process will be to track the troops individually from the morning reports which are a personnel type record that documents soldiers' presence for duty with their unit on a given date.

(6) The Task Force has also conducted some preliminary cohort selection activities in connection with the pilot study. The basis for beginning this effort was contained in a letter from the Chair, Pro-Tem, Cabinet Council on Human Resources to the Secretary of Defense on April 8, 1982. This letter recommended that the Department of Defense begin the records search necessary to provide the Veterans Administration with subjects for the initial pilot study. These activities have enabled the Task Force to ascertain practical problems that are likely to be encountered once a cohort selection system is finally approved. These preliminary category activities have focused on selecting "exposed," "non-exposed," and "non-Vietnam" cohorts for study and comparison.

The net result of all these steps is that the Task Force is ready to move rapidly as soon as final decisions are made by other agencies regarding the type of epidemiological studies that are most suitable in the circumstances. In the event that requirements differ drastically from our present understandings, the Task Force may require more time to implement new records research procedures. While awaiting the needed guidance regarding these studies, we are moving forward with research relating to the Services HERBS Tape that records herbicide spraying. We are also actively engaged in service-related research and responding to requests from the courts for information and documentation on Agent Orange.

We are anxious to begin full scale data retrieval activities in support of the epidemiological studies. For the reason, we are hopeful that it will soon be possible to decide on the appropriate cohort selection strategy for these studies. This would provide the guidance that the Army's Agent Orange Task Force must have, before it can begin to retrieve data, for use in the studies of the possible long-term effects of Agent Orange.

Mr. Chairman, this completes my statement. I will be happy to answer any questions you may have.

PREPARED STATEMENT OF DONALD L. CUSTIS, M.D., CHIEF MEDICAL DIRECTOR, DEPARTMENT OF MEDICINE AND SURGERY, VETERANS' ADMINISTRATION

Mr. Chairman and Members of the Committee, good morning. On behalf of the Veterans Administration, we are pleased to have the opportunity to appear before you today to provide an update on the status of both VA's Agent Orange-related activities and the Readjustment Counseling Program. We are continuing efforts to resolve the complex medical and scientific questions concerning Agent Orange. In the interim, we are providing medical care and treatment, as well as information to Vietnam veterans. We believe that a great deal of progress has been made in both areas since we last appeared before this committee on May 6, 1981.

Mr. Chairman, we are aware that both the Agent Orange issue and readjustment to civilian life remain key concerns for many Vietnam veterans. A great deal still needs to be done to resolve both of these concerns. Let me reemphasize, however, that the Veterans Administration had never lost sight of the special needs of the Vietnam veteran.

AGENT ORANGE PROGAM

On June 30, 1982, Robert P. Nimmo. Administrator of Veterans' Affairs, officially approved a revised Department of Medicine and Surgery program of Agent Orange-related activities. The most significant activity which was approved is a pilot study as a preliminary to the full epidemiological study provided for by Congress. Other major efforts included are the Vietnam veterans identical twin study, a mortality study, and specially-related research projects.

Approval was alos given for the establishment of the Agent Orange Projects Office within the Department of Medicine and Surgery. This office will coordinate and monitor a variety of epidemiological projects. Efforts are now underway to iden-

tify key epidemiologic staff who will be responsible for these efforts. The core staffing will consist of an Epidemiologist, Biostatistician, Statistical Programmer, Health Science Specialist for Quality Assurance, an Administrative Assistant and supporting clerical staff.

In addition, approval was given for continuation and improvement of the Agent Orange Registry, chloracne activities, a follow-up to the literature analysis, a monograph series, establishment of a Vietnam service indicator in the Patient Treatment File (PTF), and a retrospective study of dioxins and furans in human adipose tissue.

Status of VA epidemiology study: The epidemiology protocol submitted to the VA by the UCLA School of Public Health on April 29, 1982, has now been reviewed by the VA Advisory Committee on Health-Related Effects of Herbicides, the Agent Orange Working Group (AOWG) and the Office of Technology Assessment. The protocol is currently being reviewed by a committee of the National Academy of Sciences (NAS). The VA has been advised that NAS is now in the final stages of this review process. It is expected that the report will be completed and forwarded to the Veterans' Administration shortly. Following incorporation of the various reviewers' comments, we will solicit bids for a contract for the conduct of a pilot study. We anticipate having that solicitation in place before this December.

The purpose of the pilot study will be to permit us to "fine-tune" the protocol for the conduct of the full-scale epidemiology study which will study a population of approximately 18,000 veterans. The pilot study has become the focal point of recent activity by the VA, the Army Agent Orange Task Force (AAOTF) and the AOWG.

The AOWG has appointed a subcommittee of its Science Panel to establish procedures for cohort selection for the epidemiology pilot study. The VA has brought in biostatistical consultants to work with this subcommittee and with the AAOTF. The subcommittee is now in the process of preparing its final report to the Science Panel.

HEALTH CARE

The Veterans' Administration is implementing the medical care and treatment provisions of Public Law 97-72, the "Veterans' Health Care, Training, and Small Business Loan Act of 1981." Shortly after the law was signed, interim guidelines for the implementation of these provisions were issued to all VA health care facilities. Those guidelines were also published in the Federal Register on December 5, 1981, to provide Vietnam veterans and the general public with the opportunity to comment.

Under the provisions of the guidelines, each veteran who served in the Republic of Vietnam and who requests VA medical care is being provided a complete medical history, physical examination and appropriate disagnostic studies. When it is determined that a condition exists requiring treatment, the responsible staff physician makes a determination as to whether the condition resulted from a cause other than the specified exposure to Agent Orange. The guidelines include a description of those conditions which I determined cannot ordinarily be considered to be due to such exposure. Ultimately, it is left to the treating physician to exercise professional judgment in determining whether the veteran should be provided care under this authority.

AGENT ORANGE REGISTRY

Since the initiation of the Agent Orange Registry in 1978, approximately 91,000 veterans have received an Agent Orange examination at VA health care facilities. The VA has provided approximately 20,000 follow-up examination for Agent Orange. The basic registry process involving a comprehensive physical examination, completion of a questionnaire and informing the veteran of the results of the examination verbally and in writing, are continuing to be followed by all health care facilities.

The monthly report, transmitted by VA health care facilities and compiled at VA Central Office, is still an effective tool in measuring the numbers of examinations (initial and follow-up) being performed at the facilities and the number of pending examinations. The Environmental Medicine Office is continuing to monitor the numbers of pending examinations to assure that the veteran is provided the Agent Orange examination and related treatment in a timely manner. facilities reporting "out-of-line" situation, that is, facilities with examinations pending more than 30 days or having more than 50 examinations pending during any reporting period are contacted by program officials at VA Central Office and directed to take immediate action to reduce the number of pending examinations to comply with Central Office guidelines.

Improvements in our registry procedures will enable the VA to match Agent Orange Registry records with records of hospitalization in the Patient Treatment File (PTF) system so that correlations can be made regarding the types of diagnoses Vietnam veterans are presenting for treatment at VA health care facilities.

The VA is cooperating with the Department of Defense with regard to Agent Orange examinations for active duty personnel. Instructions will be mailed to all VA health care facilities for processing an active duty service member's request for an examination and for processing the forms. The results from this examination will be entered into the Agent Orange Registry.

TWINS STUDY

The VA has recently given approval for the development of a comprehensive protocol that will involve studying identical twins. The proposed study would involve identical twin veterans where one twin served in Vietnam during the period of Herbicide Orange spraying and where the twin sibling did not serve in Southeast Asia. This study will be designed to investigate whether the current psychological and physical health of vietnam veterans was adversely affected by their military experience in Vietnam. Veterans Administration researchers at our St. Louis VA Medical Center have proposed the study and are currently developing the protocol. We would anticipate that if the protocol survies the scrutiny of appropriate scientific reviews, we will launch into the physical examinations of some 450 pairs of identical twins in late 1983 and should have an initial report of findings by October 1984.

VIETNAM VETERAN MORTALITY STUDIES

A carefully-designed and well-executed mortality analysis of Vietnam veterans will provide background to many questions raised by the Agent Orange exposure issue in particular as well as the possible health effects of service in Vietnam in general. The Vietnam Mortality Study is designed to analyze and compare death rates and cause-of-death profiles of veterans with service in Vietnam and comparable veterans with no service in Vietnam.

The studies will use existing computer records to assemble a cohort of veterans and determine their mortality experience. It should be noted that the mortality studies will provide mortality information which may prove useful primarily in suggesting areas for further scientific study. These mortality studies will be conducted by researchers at the Veterans Administration Central Office in Washington, D.C. The collection and coding of death certificates and the abstracting of military records will be done by VA contractors. We are currently evaluating submitted proposals and hope to sign contracts for these efforts shortly. It is anticipated that it will take approximately two years to complete the mortality studies.

RETROSPECTIVE STUDY OF DIOXINS AND FURANS IN ADIPOSE TISSUE OF VIETNAM-ERA VETERANS

The Environmental Protection Agency has been collecting adipose tissue from the U.S. general population.

This National Adipose Tissue Bank was initiated in 1968 and now contains specimens from approximately 6,000 individuals. Represented within this bank is adipose tissue from approximately 300 males born between 1938 and 1952. It is estimated that approximately 200 of these males have served in the U.S. military during the Vietnam era and that as many as 70 may have served in Vietnam.

We are currently developing an agreement by which the VA would support an interagency study to be conducted at the EPA Dioxin Laboratory in Bay St. Louis, Mississippi. This will be a retrospective study of chlorinated dioxins and furans in human adipose tissue. The study is designed to establish background levels of 2,3,7,8-TCDD in the U.S. male population. In addition, this study may serve as a means of determining whether service in the military and especially in Vietnam has had an effect on the levels of TCDD in the adipose tissue.

The proposed effort would involve a jointly-funded program between the VA and EPA to develop the research protocol and appropriate sampling and analytical methods. The actual analyses of the human tissues will be costly and time consuming. Data should be forthcoming within two-three years.

CHLORACNE ACTIVITIES

The review of skin conditions to identify questionable cases which may be chloracne is continuing. Over 3,200 Rating Decision Sheets on skin condition claims have been reviewed by VA Central Office physicians. The medical records of questionable

cases were reviewed by a dermatologist consultant at the Washington VA Medical Center who tentatively identified 12 cases requiring a further clinical review which will include a physical examination of those individuals.

We are in the process of making arrangements for the physical examinations, including dermatology examinations, of these individuals at selected non-VA clinics. I anticipate that these examinations will be conducted during October.

We intend to continue our review of Rating Decision Sheets provided by VA Central Office Compensation and Pension Service to determine possible chloracne cases and recommend selected claimants for special dermatological examination. Additionally, we will review and analyze Agent Orange Registry data relating to types of skin conditions being reported by participants.

I am confident that our current emphasis on chloracne-related activities will assist us in more effectively identifying and treating skin conditions which may be the result of exposure to Agent Orange.

VIETNAM SERVIVE INDICATOR FOR PATIENT TREATMENT FILE

The Patient Treatment File (PTF) maintained by the Department of Medicine and Surgery has great potential for epidemiological research related to Vietnam veterans. A major problem with the automated file is that there has been no entry to identify those veterans who actually served in Vietnam.

The establishment of such an indicator, in most instances, will require a hand search of the individual veteran's service record. This would best be accomplished by a contract with an organization which has a proven record of expertise with this type of effort.

We intend to conduct a study to determine the feasibility and cost of obtaining a veteran's service history. Based upon the results obtained, we will then decide whether to obtain this information for all Vietnam-era veterans in the PTF.

SPECIALLY-SOLICITED RESEARCH ACTIVITIES

Medical Research Services has recently approved 10 new Agent Orange research studies that will investigate the impact on basic biological processes of low levels of exposure to components of Agent Orange. Two other ongoing studies address these issues also. The studies include analysis of the impact of Agent Orange components on: Liver cell function; skin cell chemistry relating to chloracne; and neurobehavioral function.

The basis of the design of each of these biological studies includes exposing a test biological system to one or more components of Agent Orange, and subsequently measuring abnormalities of biological function.

The chemicals used in these experiments which are the main component parts of Agent Orange are: 2,4-dichlorophenoxyacetic acid (2,4-D) and 2,4,5-trichlorophenoxyacetic acid (2,4,5,-T). In additon to these chemicals, Agent Orange (and some other herbicides used less frequently in Vietnam) contained varying amounts of a contaminant commonly referred to as TCDD (dioxin) which will also be a focus of studies to determine whether and how delayed toxicity is manifested after low-dose exposure. Such studies may provide clues for clinicians as to what medical tests would best identify delayed, toxic effects, if any, of exposure of veterans to herbicides in Vietnam.

The biological systems thought to be affected by exposure to TCDD are:

Liver function: When animals are exposed to TCDD and related compounds, these chemicals are stored in the liver and produce acute liver damage. It would appear likely that any delayed harmful effects of exposure to low doses of such compounds would be manifested by subtle changes in the biochemistry of the liver. Seven of the funded research studies will investigate the delayed impact of exposure to Agent Orange components and the contaminant TCDD on various aspects of liver cell functions in a variety of species.

Skin: Chloracne is the one documented effect of low-dose exposure to Agent Orange in humans. One study will analyze the underlying biochemical events that lead to chloracne in a mouse model and in human tissue culture cells.

The nervous systems: Acute accidental poisoning with TCDD in man has led to a variety of usually-acute neuromuscular abnormalities. Four studies will systematically investigate the effect of the components of Agent Orange on neuromuscular function, sleep and behavior in a variety of animal models.

A new effort to solicit and support research on the special health problems facing Vietnam veterans has just begun. The Research and Development Office has sent forward to all VA medical facilites a solicitation for research studies dealing with disorders affecting Vietnam veterans and their families. It is anticipated that a sig-

nificant number of new studies submitted in response to this solicitation will be supported in fiscal year 1983.

MONOGRAPH SERIES

Funding has been provided during fiscal year 1982 for the preparation of a monograph series designed to provide useful scientific information on environmental factors that may have affected the health of military personnel serving in Vietnam.

Monographs are planned on the following subjects: chloracne, birth defects and genetic counseling, insecticides used in the military, and Agent Blue.

LITERATURE ANALYSIS

Mr. Chairman, as you may know, the comprehensive literature review of worldwide scientific literature on Agent Orange and other phenoxy herbicides used in Vietnam has been completed in accordance with the provisions of Public Law 96-151. We have distributed this two-volume report (which includes an annotated bibliography and analysis of 1,200 scientific papers) widely within the VA.

Copies have also been provided to members of the White House established Agent Orange Working Group, the Advisory Committee on Health-Related Effects of Herbicides, the National Academy of Sciences, the Office of Technology Assessment, the Departments of Agriculture and Defense, Surgeon General of the U.S. Air Force, Library of Congress, the Centers for Disease Control and other individuals, organizations, and scientific research groups. The successful completion of this review represents a step forward on the long road to understanding the complex health issues related to the use of herbicides. It will undoubtedly serve as an invaluable scientific resource which will assist scientists and others in identifying areas suitable for additional research.

We intended to periodically update this report and to augment it with a detailed critical assessment of all publications addressing herbicide exposure with particular emphasis on health consequences in humans. It is estimated that about 400 publications have appeared since October 1981. A critical review of these recent reports is needed in order to keep this effect current. The Veterans Administration will take necessary steps to ensure that the literature review and analysis remains as current as possible.

ARMED FORCES INSTITUTE OF PATHOLOGY (AFIP)

The Veterans Administration is continuing to cooperate with the Armed Forces Institute of Pathology in providing biopsy and autopsy materials for analysis to the Institute. This special registry was established in 1978 with the purpose of analyzing tissue samples to determine what diseases Vietnam veterans are suffering from, as reflected in biopsies or autopsies.

The VA has repeatedly emphasized the importance of the AFIP Registry and will continue to urge VA health care facilities to send pathological material obtained from any Vietnam veteran.

EDUCATION ACTIVITIES

Mr. Chairman, our environmental physicians, as Agency Orange coordinators at our major VA health care facilities, remain the key link in examining and advising the veteran concerned about exposure to Agent Orange. In order to ensure that these health care staff remain completely abreast of the latest developments, nationwide conference calls are held on a regular basis. When required, special conference calls are scheduled on significant developments requiring their immediate attention.

In addition to the conference calls, relevant Agent Orange-related literature is periodically sent to the immediate attention of environmental physicians. Staff support within the Environmental Medicine Office is available to assist in the explanation of specific documents or to answer questions which may be raised by the information received from VA Central Office.

Environmental physicians are encouraged to participate in important scientific meetings on Agent Orange and other environmental substances in order to keep abreast of scientific and medical developments. Members of our own VA Central Office staff played a key role in the planning and organizing of an "International Symposium on Chlorinated Dioxins, and Related Compounds" which was held in Arlington, Virginia, on October 25-29, 1981. On October 12-14, 1982, Dr. Barclay M. Shepard, my special assistant, and Dr. Alvin L. Young will actively participate in the "3rd International Symposium on Chlorinated Dioxins and Related Compounds"

which will be held in Salzburg, Austria. I have been advised that several of our environmental physicians are also planning to attend. Through such participation I am confident that our health care staff will remain professionally current with the latest findings on the short and longrange effects of Agent Orange and other environmental substances.

VA PUBLIC INFORMATION ACTIVITIES

As part of our effort to inform Vietnam veterans, their families, and other concerned individuals and organizations about Agent Orange and the assistance provided by the VA, we produced and distributed to all VA field stations a videotape entitled "Agent Orange: A Search for Answers."

While a recent internal survey indicated that many thousands of people have viewed the program on television or in numerous groups of individual showings, we are encouraging greater use of the film.

We are very pleased to report that this videotape has received considerable acclaim from critics. The Health Education Communication Association and the Network for Continuing Medical Education presented an award of merit to the VA for "outstanding achievement in the use of television for education in the health sciences." The International Television Association (ITVA) awarded its Golden Reel of Excellence for the videotape's "highly-effective form of communication, which helped the user organization better achieve its stated goals." The program also was cited by ITVA for creativity, innovative techniques, and high-production value. In addition, the program also received an Emmy Award from the National Academy of Television Arts and Sciences.

We are delighted by this recognition and encourage all interested individuals to view this program.

The VA takes seriously its obligation to keep veterans informed about Agent Orange. We have also pursued other avenues to provide information and education to concerned Vietnam veterans and their families and VA employees on matters related to Agent Orange.

Early this year, an automated mailing list was developed from the Agent Orange Registry. In June, letters were sent to these veterans along with the first two of a new series of printed information material on Agent Orange. One of these pamphlets was devoted primarily to Public Law 97-72. A third pamphlet has been issued and a fourth is in production.

VA officials have participated in public seminars, news media interviews and other public forums dealing with the subject of Agent Orange.

VA LIAISON WITH STATE AGENT ORANGE ACTIVITIES

At the present time, 18 states have initiated programs directly related to the Agent Orange issue. The VA is continuing its efforts to maintain an effective, ongoing relationship with each of these state programs. One of the prime responsibilities of our Agent Orange Research and Education Office is to insure that current and accurate information regarding VA Agent Orange-related activities is disseminated on a timely basis to the various states, as well as to veteran service organizations, government agencies, and interested parties. We consider it to be an essential part of our program to insure that the veterans population as a whole, and those who serve them at all levels, are fully informed both with regard to the current body of knowledge regarding the possible adverse effects of dioxins, as well as the status of VA Agent Orange programs.

To this end, the VA has provided the states with copies of all pertinent Agent Orange materials and we have extended to officials from all of these states an open invitation to attend the VA Advisory Committee meetings. Several of the states sent delegations to the meeting held on August 31.

The efforts are of a continuous nature and are beneficial to all concerned parties. As new states become involved in the Agent Orange issue, VA will include them in its information exchange program.

WHITE HOUSE AGENT ORANGE WORKING GROUP (AOWG)

We are pleased to report that the Veterans Administration is continuing to play an active role in the White House Agent Orange Working Group and its Science Panel.

This committee was established in July 1981 when the Interagency Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants was expanded and elevated in status to the Cabinet Council level.

The AOWG brings together policy officials and scientists from throughout the federal establishment to identify ongoing research activities on Agent Orange and related matters and to develop and organize the means to carry out additional needed scientific research.

The Department of Health and Human Services (DHHS) is the lead agency in the working group. In addition to DHHS and VA, the AOWG includes representatives from the Departments of Defense, Agriculture, and Labor, Environmental Protection Agency, Office of Management and Budget, Council of Economic Advisors, Office of Science and Technology and Office of Policy Development.

The AOWG has been very helpful to the VA in the review of our planned epidemiological study, mortality study, and other important research efforts. Through the AOWG mechanism, the VA also has been able to contribute to the success of Agent Orange research efforts conducted or sponsored by other federal departments and agencies. The more important of these research efforts are the U.S. Air Force's "Operation Ranch Hand" study and the Centers for Disease Control's Birth Defects Study.

We view our participation as vital to the scientific process and as fully consistent with the President's goal of ensuring ". . . that the full resources of the federal government are available to support the working group's continuing efforts."

ADVISORY COMMITTEE ON HEALTH-RELATED EFFECTS OF HERBICIDES

This committee, established in 1979, continues to meet quarterly at VA Central Office for the purpose of assembling and analyzing information which the VA needs to formulate medical policy and procedures on the complex questions surrounding veterans' herbicide exposure.

During recent meetings the committee has discussed the VA epidemiological study and herbicide literature review, the VA-solicited in-house research program regarding Agent Orange and Agent Blue, the VA mortality study, international dioxin symposiums, the Air Force Health Study, the CDC Birth Defects Study, the proposed VA Twin Study, the AFIP Agent Orange Registry, the VA monograph series, and many other research activities and matters of concern to Vietnam veterans and scientists searching for answers to the difficult questions raised about the possible human health effects of herbicides.

The committee has been particularly helpful in advising the VA on the literature review and the epidemiological study. The literature review, published October 1981, was the subject of several sessions and considerable time and attention have been devoted to a critique of the proposed epidemiological study design.

Vebatim transcripts are prepared and made available to appropriate government offices and interested organizations and individuals. A copy of each transcript also is sent to all environmental physicians.

POLICY COORDINATING COMMITTEE

In recognition of the importance of the Agent Orange issue, the Administrator has reorganized and elevated in status the Policy Coordinating Committee (PCC) which was the Agency's central coordinating point for Agent-Orange related activities. The PCC develops policy for review and approval by the Administrator. It now is composed of the top leadership of the major departments and staff offices within the VA. Mr. Everett Alvarez, Jr., Deputy Administrator, chairs the PCC.

I wish to conclude this part of my testimony on Agent Orange, Mr. Chairman, by again expressing the total commitment of the Veterans Administration to attempting to resolve the many issues relating to Agent Orange. Although there is no way that we, or anyone, can guarantee that ultimate and conclusive answers will be found to the extremely-complex medical and scientific issues stemming from the use of the defoliant Agent Orange in Vietnam, nevertheless, we will continue to vigorously pursue the search for those answers. These efforts will center not only on our own research initiatives, but will be closely interfaced with the intensive research now underway by other federal, public and private institutions.

READJUSTMENT COUNSELING

The Vietnam-era Veterans Readjustment Counseling Program has seen a number of important developments in recent months.

In January, the veterans Administration vested responsibility for this program in a new independent professional service—the Readjustment Counseling Service—and established that service on the same administrative level as Medical, Surgical, Nursing, Prosthetics, etc.

A new program director was appointed by the Administrator of Veterans Affairs on February 10, 1982, following an intensive and thoughtful search and selection process. The new Director of the Readjustment Counseling Service, psychiatrist, Arthur S. Blank, Jr., M.D., is a Vietnam veteran and has been psychiatric consultant to the program since its earliest planning stages in 1979.

A third leadership initiative was taken on June 1, 1982, when a new position was created, Chief of Counseling Services, and an expert clinician Dr. Raymond M. Scurfield from the Brentwood VA Medical Center was hired for this position.

Underscoring the significance the Administrator attaches to the Readjustment Counseling Program is the establishment in November 1981 of a high-level Agencywide steering committee to monitor the program.

Improving the management and organization of the Vet Center Program has been one of our top priorities. In addition to augmenting our Central Office program management group, we have taken steps to strengthen the offices of our six Regional Coordinators who oversee Vet Center operations in their respective regions. During the developmental phase of the program, each of these important offices was staffed by a Regional Coordinator and a single secretary. Each Regional Office now has an Assistant Coordinator for Administrative Services, and we are further strengthening the Regional Coordinators' staffs with the appointment of an Assistant Coordinator for Clinical Services and an additional secretary.

From an organizational standpoint, the most important development of recent months has been the publication of a new program circular, which clarifies lines of authority and responsibility. It contains several key elements:

(*a*) The responsibilities of the Director and the Readjustment Counseling Service staff in Central Office for overall supervision and management of the program are spelled out. The Director and his staff have direct operational control of the Vet Central system through the Regional Coordinators and, within Central Office, report to the Deputy ACMD for Professional Services and to the Chief Medical Director through the Associate Deputy Chief Medical Director.

(*b*) The responsibilities of the Regional Coordinator's staff are also clarified. We have established clear lines of authority and responsibility from Vet Centers to the Regional Coordinator's staff to the Readjustment Counseling Service in Central Office. The Regional Coordinators are responsible for selection and all supervision of the Team Leaders, and the program director is responsible for selection and all supervision of the Regional Coordinators. We have also spelled out the relationship between Vet Centers and their local VA Medical Center parent facilities. The circular directs that the parent VA medical center is responsible for providing the Vet Center all required support services. On professional matters, the medical center's role with respect to the Vet Center operations is to be consultative and collaborative only.

As part of our reconstituting of the management and organization of the readjustment counseling program, we have instituted financial and accounting procedures which track all program funds and maintain their earmarked character at the local level.

As you know, Mr. Chairman, we have also established a mechanism to contract with private sector providers to furnish readjustment counseling services to Vietnam-era veterans who do not have access to one of our Vet Centers. We are using a decentralized model with a contracting committee at each of 12 medical centers. The contracting committee includes two members of a Vet Center staff in each instance. As of August 31, over 300 contracts had been awarded. We are currently evaluating the quality and effectiveness of this new mode of service delivery.

That concludes my statement, Mr. Chairman. I will be pleased to answer any questions you or members of the committee may have.

September 7, 1982

Curtis

FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY / STUDY TITLE	TYPE OF STUDY					STATUS		
	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
VETERANS ADMINISTRATION								
VA Epidemiologic Study of Ground Troops Exposed to Agent Orange During the Vietnam Conflict	X	X	X	X			X	1987
Vietnam Veteran Mortality Studies	X						X	Late 1984
Vietnam Veteran Identical Twin Studies		X		X			Protocol	Initial 1984
Survey of Patient Treatment File for Vietnam Veteran In-patient Care		X	X				X	Initial Survey 1983
Agent Orange Registry Examinations		X	X				X	Indefinite
TCDD in Body Fat of Vietnam Veterans and Other Men		X			X	X		Publication in Preparation
Retrospective Study of Dioxins and Furans in Adipose Tissue of Vietnam-Era Veterans					X		X	1985
DEPARTMENT OF DEFENSE								
Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicide Orange (Air Force Health Study)	X	X	X	X			X	Baseline 1983 Complete 1999

eptember 7, 1982

FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

ENCY / STUDY TITLE	TYPE OF STUDY					STATUS		
	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
EPARTMENT OF DEFENSE								
Armed Forces Institute of Pathology Agent Orange Registry of Vietnam Veteran Biopsy Tissues			X				X	Indefinite
EPARTMENT OF HEALTH AND UMAN SERVICES								
CDC Birth Defects and Military Service in Vietnam Study				X			X	Late 1983
NIOSH Dioxin Registry	X	?	X	?			X	Indefinite
NIOSH Establishment and Maintenance of an International Register of Persons Exposed to Phenoxy Acid Herbicides and Contaminants	X		X				X	Indefinite
NIOSH Soft Tissue Sarcoma Investigation			X				X	Indefinite
NCI Case Control Study of Lymphoma and Soft Tissue Sarcoma			X				X	Indefinite
NCI Study of Mortality Among Pesticide Applicators from Florida						X		Publication in Press

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FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY / STUDY TITLE	TYPE OF STUDY					STATUS		
	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES								
NIEHS Investigation of Leukemia Cluster in Madison County, Kentucky Allegedly Associated with Pentachlorophenol Treated Ammunition Boxes			X			X		Publications in Press
ENVIRONMENTAL PROTECTION AGENCY								
Report of Assessment of a Field Investigation of Six-Year Spontaneous Abortion Rates in Three Oregon Areas in Relation to Forest 2,4,5-T Spray Practices				X		X (Published)		
National Pesticide Monitoring Project of Human Adipose Tissue					X		X	Indefinite (Annual Reports)
DEPARTMENT OF AGRICULTURE								
A Case Control Study of the Relationship Between Exposure to 2,4-D and Spontaneous Abortions in Humans				X		X		
DEPARTMENT OF AGRICULTURE								
Exposure Measurements of Mixers, Loaders and Applicators of 2,4-D on Wheat					X		X	1982
Exposure of Forest Workers to Ground Applications of 2,4-D					X		X	1983

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FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Dat
VETERANS ADMINISTRATION							
Review of Literature on Herbicides, Including Phenoxy Herbicides and Associated Dioxins				X	Published 1981		Annual Update Approved
Urinary 6-Hydroxy Cortisol: Physiological and Pharmacologic Studies (Including Agent Orange)	X					X	1982
Effect of TCDD on Lipid Metabolism	X					X	1983
Mechanisms of Dioxin Induced Toxicity Using the Chloracne Model - Phase I	X				X		Publication in press
Behavioral Toxicity of An Agent Orange Component 2,4-D	X					X	1984
Effects of 2,3,7,8-Tetrachloro-dibenzodioxin on Hepatobiliary Function in Animals	X					X	1985
Mechanism of TCDD Absorption and Toxicity on Lipid and Lipoprotein Metabolism	X					X	1985
Metabolism of the Herbicides Present in Agert Orange and Agent White	X					X	1985
TCDD Exposed Rhesus Monkeys: Effects on Behavior and Stress Hormones	X					X	1985
Neuromuscular Toxicity of Agent Orange	X					X	1985

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FEDERALLY SPONSORED HUMAN STUDIES RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY					STATUS		
STUDY TITLE	Mortality	Morbidity	Cancer	Repro-duction	Analytical	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF AGRICULTURE								
Exposure Measurements of Mixers, Loaders and Applicators of 2,4-D on Wheat					X		X	1982
Exposure of Forest Workers to Ground Applications of 2,4-D					X		X	1983

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FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Dat
VETERANS ADMINISTRATION							
Mechanisms of Dioxin Induced Toxicity Using the Chloracne Model - Phase II	X					X	198
Effects of Low Dose TCDD on Mammalian Chromosomes and Liver Cells	X					X	198
Mechanism of Porphyria Caused by TCDD and Related Chemicals	X					X	198
Effects of Agent Orange on Sleep	X					X	198
DEPARTMENT OF HEALTH AND HUMAN SERVICES							
Bioassay of Octachlorodibenzo-p-dioxin	X					X	
Carcinogenesis Bioassay of 2,3,7,8-Tetrachlorodibenzo-p-dioxin in Swiss Webster Mice	X					X	
Carcinogenesis Bioassay of 2,3,7,8-Tetrachlorodibenzo-p-dioxin in Osborne-Mendel Rats and B6C3F1 Mice	X				X		
Bioassay of a Mixture of 1,2,3,6,7,8- and a Mixture of 1,2,3,6,7,8-Hexachlorodibenzo- p-dioxins for Possible Carcinogenicity	X					X	

September 7, 1982

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES							
Comparative Species Evaluation of Chemcial Disposition and Metabolism of 2,3,7,8- Tetrachlorodibenzofuran (TCDF) in Rat, Monkey, Guinea Pig and Two Strains of Mice	X					X	
Neurotoxicity of 2,4-D in Rodents	X				X		
Studies of the Chemical Disposition and Metabolism of Octachlorodibenzodioxin (OCDD)							X
Effects of Agent Orange Components on Male Fertility and Reproduction	X				X		
Mutagenicity Studies of TCDD, 2,4-D; 2,4,5-T and Esters of 2,4-D and 2,4,5-T	X					X	
Implications of Low Level Exposure to Dioxins	X					X	
Mechanisms of Toxicity of the Chlorinated- p-dioxins	X					X	
Research Toward Understanding the Molecular Level Mechanisms of Toxicity of TCDD and Related Compounds	X					X	
Synthesis of Selected Tetrachloro-dibenzo-p-dioxins and Related Compounds as Analytical Standards			X			X	

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FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY / STUDY EFFORT	TYPE OF STUDY				STATUS		
	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF HEALTH AND HUMAN SERVICES							
Matrix Effect and Sub Parts-per-billion Quantitative Analysis of TCDD by Mass Spectrometry - With Special Reference to Milk	X		X			X	
Toxic Actions of Tetrachloroazobenzene Dioxins	X					X	
Xenobiotic Induction of Pleiotropic Responses in Liver	X					X	
Molecular, Biochemical Actions of Chlorinated-p-dioxins	X					X	
Mechanism(s) for Toxicity of Chlorinated Dibenzodioxins	X					X	
ENVIRONMENTAL PROTECTION AGENCY							
Evaluation of Large Scale Combustion Sources		X	X			X	
Evaluation of Municipal Waste Combustors		X				X	
Bacterial Decomposition of TCDD		X				X	
Investigation of Bioavailability to Fresh Water Fish of TCDDS in Fly Ash	X	X				X	
Analysis of Environmental Samples for PCDDs and PCDFs		X	X			X	

September 7, 1982

FEDERALLY SPONSORED LABORATORY STUDIES AND LITERATURE SURVEYS RELATED TO AGENT ORANGE

AGENCY	TYPE OF STUDY				STATUS		
STUDY EFFORT	Animal	Environmental	Analytical	Literature	Completed	Ongoing	Estimated Completion Date
DEPARTMENT OF AGRICULTURE							
Survey of Phenoxy Herbicide Use by Agricultural Commodity				X		X	
Survey of Phenoxy Herbicide Literature				X		X	Annual Bibliographies Published
Photolysis of 2,4,5-T			X			X	
Biological and Economic Assessment of 2,4,5-T and Silvex				X		X	
TCDD Residue Monitoring in Deer	X	X			X		Report in Preparation
DEPARTMENT OF DEFENSE							
Environmental Chemistry of Herbicide Orange and TCDD		X	X			X	Indefinite

PREPARED STATEMENT OF KARL BERNING

The State of Illinois Agent Orange Study Commission consists of eight legislators, one of whom is a Vietnam veteran; and five public members appointed by the Governor, three of whom are former members of the armed forces in Vietnam and one, a Red Cross worker in Vietnam.

The Commission, beginning in February, 1982 has been directing attention to, at least, determining what medical, administrative and social assistance is needed for those veterans in Illinois who are victims of dioxin exposure and to submit its recommendations to the legislature for its consideration.

In addition, our purpose is to act as the official agent of the State for disseminating information to Vietnam veterans about epidemiological studies relating to dioxin exposure which have been and are being conducted by government and private sector agencies.

Several hearings have been held so far with the next one to be in Rock Island on September 18. Attendance has been heavy and many veterans or members of their families have testified.

The Commission has striven to accommodate all who wanted to testify assuring everyone the purpose of our hearings is to document and tabulate the physical and mental ailments experienced, while promising no direct aid or medical benefits. We are a fact finding commission, but we are becoming an advocate.

The litany of complaints is repetitive and includes chloracne, numbness in hands and feet, severe abdominal pain, headaches, fits of rage or depression, cancer, and of greatest concern the apparently higher than usual percentage of birth defects in children. However, the way the Viet Nam Veterans have been brushed off by VA hospitals and doctors, according to repeated statements is the most infuriating aspect of the veterans efforts to get help. This treatment and attitude has caused deep animosity.

I'm not interested in criticizing or attacking but we in the Illinois Legislature representing all Illinois citizens feel there has been too much delay in facing up to what, to many of us, is an obvious, urgent problem of huge dimensions. Continued studies of various aspects of the Agent Orange problem are necessary and should be continued—however—I remind you ladies and gentlemen, our fellow citizens are suffering and dying now—with little or no help from their government—even treated with abuse and contempt by the VA according to repeated testimony the Illinois Agent Orange Commission has listened to.

The excuse that dioxin has not been proven to be the cause of health problems is of no comfort to those who can get no relief from pain. I suggest the pain and death are real and there is no proof they are not caused by dioxin. These veterans deserve help today.

Members of the committee we thank you for your courtesy in listening to our testimony. We stand ready to answer questions and would be pleased to share with you some of the heart-rending accounts of the ordeals of some of those who have appeared before the Illinois Agent Orange Commission.

STATEMENT OF GEORGE A. FINCHUM, VIETNAM VETERAN

JUNE 10, 1982.

My name is George Finchum, in 1971 to 1973 I served as a helicopter doorgunner with the 1st Aviation Brigade in VietNam. At the time I still believed in my country and I came here with the hope that one day I can again.

For the last ten years I have watched as the media, American public and the government ignore, harass and discriminate against my bother veterans. I myself, have been physically ill, but to date have no answers as to why. I have been told by employers that I cannot do unskilled labor because combat vets from "Nam" are not stable. I need a job to feed my family not committees. I need to know that I'll see my children and grandchildren (normal children) grow and prosper. I need to know that the good decent men who fought your war will receive "Just" compensation for services rendered, not so much for us but for our families. I don't make enough money to pay taxes and I have yet to vote in my life.

So you can ignore me as you have the others in the past, or do something positive.

But I say this in closing, I have two young sons, and I swear by all that's Holy I will make the streets run red before anyone does to them what's been done to me.

Thank you,

GEORGE A. FINCHUM.

VETERANS ASSISTANCE COMMISSION OF COOK COUNTY,
Chicago, Ill., July 21, 1982.

Sen. KARL BERNING,

Chairman, State of Illionis, Agent Orange Study Commission, Capitol Building, Springfield, ILL.

DEAR COMMISSIONERS: I wish to take this opportunity to commend your Commission's public hearings in regard to Agent Orange. As I stated when I spoke before this Commission in Chicago recently, we of the Veterans Assistance Commission first had to learn what is going through the minds of the Vietnam Veteran to be able to understand them.

At the public hearing, we listened to family members, social workers and Agent Orange victims speak about their skin rotten with chloracne, their bodies latent cancer carriers; Veterans addicted to drugs and alcohol, who use both to cope and forget; post traumatic stress disorder victims, etc. Might I remind you that these are the men and women who are now filling our state psychiatric wards, jails and prisons. Statistics show that at least 40 percent are Vietnam Veterans; an incredible number of the American prison population.

Commissioners, did you take note? I can speak first-hand from my own experience . . . very few of these victims have jobs. It is my qualified opinion after consulting with a number of professionals in the social service field (psychologists, employment specials) that much of the stress would be held to a minimum if the unfortunate Vet had a job and if he would be given the assurance that the VA would treat him and his children to combat Agent Orange illness.

One way we can aid these unfortunate Veterans is to establish a Special State Employment preference for these deserving Veterans so that they can slowly take their normal, rightful place in society. Knowing them and working with these Vietnam Veterans all these years, I am sure it's not asking for very much.

SHELDON BROWN, *Superintendent.*

[Aurora Beacon News]

OFFICIAL: AGENT ORANGE VICTIMS BEING IGNORED

Chicago.—Medical problems of Vietnam veterans exposed to Agent Orange are ignored by the Veterans Administration because compensation would be too expensive, a veterans benefit counselor says.

Maude Devictor told members of the Illinois Agent Orange Study Commission on Saturday that the situation of the veterans is "the most heart-rending and sad . . . that the human mind can encompass."

Staurday's meeting in downtown Chicago was the second of several sessions to be held around the state by the 15-member panel, comprised of legislators and private citizens.

Testifying befor the group, veteran Thomas Vazquez said that when he began to show signs after exposure to the defoliant; military officials assured him the problem was merely "jungel rot." Vasquez said he is still afflicted with headaches and blackouts, as well as numbness and tingling in his arms.

Vasquez said he had been frustrated by "half-hearted" attempts on the part of the federal government to examine the effects of Agent Orange.

VA hospital doctors told him his aliment was psychological.

State Sen. Karl Berning R. Deerfield, is chairing the commission.

It was formed last year to research problems encountered by Agent Orange victims and eventually to draft legislation for medical, counseling and legal aid to veterans and their families.

William Davis, chairman of the Illinois Veitnam Veterans Civic Council, warned that the commission study must not result in "another whitewash program, not another unrequested adversary in our fight for treatment and compensation.

Robert Ginsburg, research director for Citizens for a Better Environment, said a registry is needed in Illinois to document and confirm the effects of Vietnam service on the health of veterans and non-military personnel.

Ginsburg also said the panel should urge the state to fund an epidemiological-toxicological study of the data collected.

An outreach program has been formed by the commission to inform Vietnam veterans who may have been exposed to herbicides and defoliants about any state or federal aid for which they might be eligible.

Testimony for Lawrence Henry Boeke

This testimony is on behalf of my husband, Lawrence Henry Boeke.

Larry enlisted in the United States Marine Corps in November 1970. He was overseas during 1971 and 1972 at which time he served in Vietnam. Larry was in Reconnaissance. During his time in Vietnam he was wounded. His right wrist had to be totally reconstructed and he lost the hearing in his right ear. Upon his return from Vietnam he was sent to Guantanamo Bay Cuba and then to Camp LeJeune, North Carolina where he was honorably discharged in October 1974.

Larry found work almost immediately but in 1977 he lost his job and could not find another for over a year. In 1978, our second child was born. About the same time Larry started to have health problems. He was always depressed and could not sleep. He could not eat, yet he seemed to be getting heavier or bloated. he complained of pains in his abdominal area, numbness in his lower legs and feet and he looked jaundiced.

Early in 1979 he went to see a doctor and was immediately admitted into the hospital. His liver was greatly enlarged and he was indeed jaundiced. The doctor said if the problem was not corrected at once that he would probably not last another week. This was the first of many hospital stays to come in the next three years. We had no idea what was ahead.

Larry was diagnosed as having hepatitis and pernicious anemia. The liver returned to normal size and vitamins were prescribed. Larry returned home within two weeks and started another job. In September of 1979 our daughter went into the hospital with pneumonia. She was ten months old. The nurses were very concerned with the fact that she wasn't even sitting by herself yet. In fact, she wasn't doing a lot of things that most ten month olds do. We just decided that she was slower than other children.

In March of 1980 Larry woke me at night and said he was in such pain that he wanted to go to the hospital. The doctor admitted him through the emergency room with probable pancreatitis. The diagnosis after many tests was acute pancreatitis. He also had an unexplainable body temperature of 96 degrees. During the routine blood tests it was noticed that there was something that the hemotologist could not identify. This was the first clue that led me to believe that Agent Orange might be a factor.

Larry was released after 11 days but a week later had to be readmitted because the pain was unbearable. Pain killers were given and no food or drink was allowed until the pain subsided. He was released only to be admitted again two weeks later.

This time a gastroenterologist was called in. He did a new test called an ERCP (Endoscopic Retrograde Cholangio-Pancreatogram) which explores the digestive track through a microscope. The stomach walls were very much inflamed as was the intestinal area. Larry was then diagnosed as having chronic pancreatitis. We were told that men who have this disease were usually in their 50's and usually did not live long because there is no cure and the pain becomes so severe that most people die from the shock.

Because of his hospital stays, Larry could not hold down a job. He was rarely well enough to go out and look for a job let alone keep a job. But in May of 1980 he did find a job and held in the pain as much as he could.

At the same time we noticed that Caroline, our daughter, was not progressing. In July we took her to DSCC (Division of Services for Crippled Children). They recommended that she be admitted into Loyola Hospital for tests. After four days of brain waves, brain scans, muscle scans and numerous blood tests all tests were normal except that there was something foreign in her blood. The neurologist recommended she have some type of therapy. Caroline was accepted into the Proviso Early Intervention Program. There we were told that she had severe developmental delays.

In January 1981 Larry's health grew worse. He had to go back into the hospital for more tests. This time they believed it had spread to his gall bladder. He was released and another month went by before he could no longer go to work. Another ERCP was performed and the doctor found that the gall bladder and common duct were blocked by stones. They recommended having the gall bladder removed but said that the chronic pancreatitis would still be there; meaning the major problem would not be corrected. Larry decided to go with the doctors' decision and the surgery was performed. The gall bladder was removed and an exploratory laparotomy was also done. They inserted a tube to drain off the excess secretions from the pancreas.

Recovery from this operation was very slow and never complete because the muscles would not grow back together. About one week after being released Larry passed out and fell, ripping the wound open. He had to be re-admitted for observa-

tion. After five days he came home. He stayed home for two more weeks and then went back to his job. On the first day back to work he was told that his insurance had been cancelled. On the following day he was told that his job had been filled in his absence and that he was no longer employed.

After yet another let down Larry started to collect unemployment. Finding another job was almost impossible because most days he was not feeling well enough to do anything. In July 1981 we had to declare bankruptcy because of the medical bills that had accumulated and since Larry could not work steadily many other bills could not be paid.

That same month Larry checked himself into Hines Veteran Hospital because of another pancreatitis flare up. They put him through the tests he had gone through so many times before. At this time one of the doctors did come out and say 'off the record' that a dangercus level of dioxin had been found in his blood. Finally after all that time somebody came out and said it. The suspicion that Larry and I had had throughout this ordeal was true. His health problems had come home with him from Vietnam. After two weeks and weighing 20 pounds lighter Larry came home only to have to return a few weeks later so that he could have the actual Agent Orange screening. At that time he filed a claim for Agent Orange compensation, but it was denied as have all the claims filed for Agent Orange.

Larry told me that after this hospital stay he had had enough and he would just have to live with the fact that his problem was never going to go away. He always tried to hide the pain so that the children and I would not see what he was going through.

In November 1981 he became employed as a security officer. He kept this job until February 1982. In February his health grew even worse. He was losing even more weight now than he had in the past three years. He never complained though. On March 24th he called me at work and asked me to come home and take him to the hospital. When I came home he was doubled over in pain. I took him to Northlake Community Hospital since it was the closest, but they refused to treat him because he did not have any insurance. I then took him to Loyola Hospital. They admitted him at once.

At 10:00 that night Larry was still in the emergency room. He told me to go home and get some rest. I called the next morning to find out what room he was in and found out he was in the Cardiac Care Unit. I couldn't understand why. I went to the hospital immediately. When I walked into his room I was shocked. The man I saw just 12 hours earlier had completely changed for the worse. He was nothing but tubes and machines. Drugs kept his blood pressure up. He was totally bloated. Later that day he had to wear an oxygen mask. That evening they did emergency surgery to try and relieve some of the pressure that the pancreas was causing. Friday morning his situation had gone to critical. He was now totally on a respirator. I wanted to stay with him but he told me to go home and take care of the kids.

At 5:00 p.m. the doctors called me and said they needed my consent to do an emergency exploratory laparotomy and would I come to the hospital right away. When I got there they were just taking Larry down to surgery. He was in very critical condition. About 45 minutes later the doctor came to me and said Larry never made it to surgery, his heart had stopped and they could not revive him. He was 29 years old.

Larry's main health problems had to do with his digestive system. As revealed in the autopsy, there was almost nothing in his body that wasn't affected by this poison. Other problems he had were the numbness in his lower legs and feet, blackouts, severe chest pains, rashes that appeared now and then, constant low body temperature, high blood pressure, blurred vision, insomnia and depression.

All of these problems which I saw in my husband and other such as birth defects, one of them being developmental delays as in our daughter, have been documented from many other cases. Through out this entire ordeal I had done considerable research on the defoliants used in Southeast Asia. I would bring it to the attention of doctors but it seemed they knew nothing about it or didn't want to know anything about it. Especially in the veterans hospital, where they are supposed to know about this subject, it was evaded.

I have contacted people in government offices. Greg Zito, a state representative, knew very little about Agent Orange and told me quite frankly it was out of his jurisdiction. John O'Connell, also a state representative and a Vietnam veteran himself, put me in touch with certain people and organizations who might be helpful. I also wrote a letter to Senator Percy who did reply and seemed to be very sympathetic about the problems of Agent Orange. It seems that the government officials also are trying to evade the subject. Otherwise I believe that more could have been accomplished by now.

Why is it that men and women are supposed to fight, die and kill for their country? So they can be forgotten and shuffled into the red tape of this government?

Larry proudly enlisted into the Marine Corps and did his tour in Vietnam without any questions. He did not go to Canada or desert so he could later be granted amnesty. He was wounded in action and never received compensation. He died because of that war and still has not received any compensation. He suffered a long painful death and is now finally at peace. But what about his children? What about Caroline, who is now 3½ years old and cannot walk, talk, cannot dress or feed herself? She is constantly sick with respiratory ailments. What about Michael, his son? He is now eight years old. Will he also develop fatal health problems like his father in the years to come?

These questions have to be answered. These problems are real and are not going to go away. The Vietnam Veterans might all be dead in 40 to 50 years but their children will go on, and their children's children, never knowing when Agent Orange may strike again.

Naturally as time goes on laws will be passed and the Vietnam veteran's problems will be treated with sincerity. When Larry was in the veterans hospital in July of 1981 he was told almost nothing. When we asked for the results of tests it was always shuffled to a doctor who wasn't on duty at the time. Now there is a law (97-72) that supposedly allows the veteran to know what has been found in tests taken. Somehow, from my past experiences I don't believe that things have changed. You will never know what the VA doesn't want you to know.

Upon my request for an autopsy, Loyola University also sent slides and blocks to the Environmental & Drug Induced Pathology labs in Washington D.C. After two months I called there asking to have the results sent to Larry's physician but they had not even started to run their tests because there was no name on the samples. Why didn't someone at AFIP contact Loyola? I gave the doctor at AFIP the full name and a brief history and was told that the results would be sent out in about a week. A month went by and I called them again. Still no results. they now needed a complete medical history and final autopsy from Loyola and had written them just two days earlier. I realize that my husband is not the only case they handle but three months of waiting and getting no results is a bit too long for me.

At the present time my main concern is what is going to be done in the immediate future. I know that time will only tell the long term effects of Agent Orange, but what about establishing programs to help victims now. Not only for the veterans, but also for the family members.

When are the Veterans Administration and United States government going to answer for their mistake?

Names and addresses of hospitals, doctors and dates:

Memorial Hospital of DuPage County, 200 Berteau Avenue, Elmhurst, Ill. 60126; May 7, 1979 to May 25, 1979, March 16, 1980 to March 27, 1980, April 4, 1980 to April 15, 1980, April 28, 1980 to May 3, 1980.

Dr. S. A. Acharya, 161 North Avenue, Northlake, Ill. 60164; January 6, 1981 to January 16, 1981, February 27, 1981 to March 31, 1981, April 9, 1981 to April 16, 1981.

Dr. Manfred Raiser, Edgewater Hospital, 5700 N. Ashland, Suite C55, Chicago, Ill. 60660.

Dr. Bradford Steiner, 240 E. North Avenue, Northlake, Ill. 60164.

Dr. Thomas Moore, Surgeons Ltd., 103 Haven Road, Elmhurst, Ill. 60126.

Hines Veterans Hospital, Maywood, Ill. 60159; July 1981 to August 1981.

Northlake Community Hospital, 365 E. North Avenue, Northlake, Ill. 60164; January 1982 to March 1982, out-patient emergency room.

Dr. Ramesh M. Patel, 4217 St. Charles Road, Bellwood, Ill. 60104.

Loyola University, Foster G. McGaw Hospital, 2160 S. 1st Avenue, Maywood, Ill. 60159; March 24, 1982 to March 26, 1982.

Dr. Richard Prinz, Loyola University.

Prepared Statement of John T. O'Connell

Mr. Chairman and Members of the Subcommittee, my name is John T. O'Connell. I am a member of the Illinois House of Representatives. I serve as Co-Chairman of the Illinois Agent Orange Commission and I, along with Senator Berning, am here to report on the Commission's activities to date.

I would like to state at the outset that a good portion of the final passage debate in the House centered on the appropriate role that Illinois should have in what is in a liability sense, a federal question. Some of my colleagues in the House contended

that the determination of causative factors in the exposure to Agent Orange should properly be left to the Federal Government. My response to that contention is that in the parlance of a fact finding process, the "adversary is investigating itself." While this is not meant to denigrate the good intentions of the Federal Government in achieving objective determinations, we felt the additional evidence produced by our state commission and other state commissions will bolster the Federal record of evidence and contribute to the overall veracity of your conclusions.

We would also respectively submit that too much time has transpired before comprehensive, structured testing has taken place in the Veteran Administration's part. Our evidence, even at this early stage in our hearing schedule, indicates that problems do exist. The testimony we have thus far has presented a commonality of symptoms ranging from rash outbreak, nervous disorder, mood change to more serious problems such as cancer and genetic defect. We are not at the stage in the evidence gathering, nor do we have the expertise to make any medical determinations when all the evidence is acquired, to say there is any causal factors with Agent Orange; however, we can say to you that these questions of medical disorders have been raised with the VA for years and it has only been recently that serious testing has begun.

We feel that more should have been done to alert Vietnam veterans of the possibilities of ill effects from exposure to this defoliant. I have heard all too often from vets that they never related their problems until they read in a book or saw a television documentary or heard a radio documentary. I have yet to hear that the inquiry into Agent Orange was initiated by the VA. While the VA does have an Agent Orange testing program, we question the effectiveness of such tests that do not include the analysis of tissue. We can state that the VA has not placed such testing on a priority scale at least in one of the Illinois locations we heard testimony. In questioning the person who administered the tests, we discovered he had no formal medical training. This does not contribute to either our belief or, more importantly, the area veterans belief that the VA is doing everything they can. Incidentally, out of the 600 persons tested in this area, not one was found to have symptoms of adverse effects from Agent Orange.

Our concern then is that the VA has had to be pulled into this controversy. Our testimony to this date points to the fact that the VA, at least in Illinois, has been unresponsive to this issue. We feel our citizens deserve better treatment. We hope that you will exercise your congressional muscle to obtain such treatment. We also hope that the answers to questions raised for the last decade will be answered well before 1988.

Prepared Statement of John F. Sommer, Jr., Deputy Director, National Veterans Affairs and Rehabilitation Commisssion, The American Legion

Mr. Chairman and Members of the Subcommittee, The American Legion appreciates the opportunity to appear before this Subcommittee today to present our views on two major issues that are of extreme importance to Vietnam veterans, their families, and to The American Legion; Agent Orange research and the Vet Center program.

A substantial amount of research relating to the health effects of exposure to Agent Orange, aside from the study mandated by Public Law 96-151, is currently either underway or in the planning stages, and we will, with your permission Mr. Chairman, comment on several of those projects.

At the outset we will address the status of the protocol of the epidemiological study of long-term health effects of Agent Orange exposure mandated by section 307 of Public Law 96-151; to include a brief chronology of events that have transpired heretofore. A contract for preparation of the protocol was negotiated with the UCLA School of Public Health by the Veterans' Administration in May 1981. A partial draft protocol was submitted to the VA in August 1981, and it was provided to the Office of Technology Assessment Agent Orange Advisory Panel, the Agent Orange Working Group, and the VA Advisory Committee on the Health-Related Effects of Herbicides for the purpose of peer review. Following the series of peer review the incomplete design was returned to UCLA along with extensive recommendations and other comments.

A revised protocol was resubmitted to VA early this year and was again reviewed by the three peer review groups in February and March 1982. Following UCLA's consideration of the comments and implementation of some of the recommendations and suggested changes emanating from the second review process, the revised protocol was again returned to Veterans' Administration Central Office on April 28. At

the present time the National Academy of Sciences is conducting a review of the protocol, and that agency should report its recommendations to VA later this month. The next step is to implement the pilot study to determine the feasibility of the Congressionally mandated epidemiological study, and it is at this juncture that The American Legion must proffer several points of concern.

Prior to the implementation of the pilot study, a request for proposal (RFP) must be published by VA for the purpose of securing proposals from qualified universities and scientific firms interested in conducting the study, so that a contract may be let. We feel that the RFP should be put out as expeditiously as possible, so as to prevent additional lost time.

However, there is also an ancillary problem that needs to be resolved post haste. The Agent Orange Working Group has recommended that the study be expanded to include a third cohort of veterans who did not serve in Vietnam, in addition to the two cohorts contained in the UCLA protocol, both of which would be composed of Vietnam veterans; one group who were likely to have been exposed to Agent Orange and another that were most likely not exposed. Use of the third cohort would expand the study, as authorized by Public Law 97-72, to include other factors of Vietnam service, as well as the research on the effects of Agent Orange exposure.

Subsequent to the AOWG recommendation, in April 1982 the Army Agent Orange Task Force was directed to begin a search for the purpose of establishing the third cohort. However, the project was ordered stopped on July 15, pending further guidance from VA on the method of selection of the third cohort—guidance which has yet to be issued.

To The American Legion it would appear that a difference of opinion exists as to whether or not the study should be expanded to include the third cohort of veterans. We would have objection to such an expansion, so long as it would not diminish the emphasis placed on determining the health effects of Agent Orange exposure. The salient point is that time is of the essence. A decision must be made now as to whether the study will include two or three cohorts of veterans. If it is decided that the third group is to be added, we would urge that the VA provide the necessary guidance to the Army Agent Orange Task Force so that they may proceed with their selection process. Failure to exercise decisiveness on this issue will only cause further delay in the commencement of the pilot study.

The timeliness of reporting study results is also essential. Granted, an important phase of the proposed study will track the long-term effects of Agent Orange exposure, but they are of no instant use to the affected veterans. Particular immediate effects of exposure have been questioned such as chloracne and certain sarcomas. Therefore, it will be necessary to promptly identify and report any such effects that are found in order to be of value to Vietnam veterans who were exposed.

Reportedly, two oversight committees are to be established by the Veterans' Administration—scientific oversight and human rights oversight—the members of which are to be appointed before the pilot study begins, and are to include veterans organization representation. To The American Legion the formation of such committees for the purpose of monitoring the epidemiological study and providing intrinsic input where appropriate is certainly commendable.

Mr. Chairman, our final concern with the PL 96-151 study is related to the conduct thereof. As has been expressed on many occasions, the Legion is opposed to the Agent Orange study being conducted by the Veterans' Administration, not because we doubt the integrity of the VA, but because we are concerned that the end results may be subject to question concerning possible conflict of interest, and it is felt that the findings of an independent scientific entity would be more readily acceptable to Vietnam veterans. We feel strongly that the study should be completed on a contract basis.

Public Law 96-151 also directed that a comprehensive review and analysis of the available literature on dioxin be completed. Under contract, approximately 1200 scientific publications were reviewed and have been incorporated into a two-volume report. We are pleased to note that a summary of the literature analysis, written in lay language, has been proposed.

Mr. Chairman, we will not offer comment on some of the other aspects of Agent Orange related research that is currently being carried out by VA, other Federal Agencies and by private entities under contract to the government. The American Legion is monitoring all of these studies, within the limits of our capabilities, and it is hopeful that the conclusive results of each of the projects will complement the total Agent Orange research effort.

The examination of Ranch Hand personnel, those Air Force personnel who were directly involved in Agent Orange spraying missions in Vietnam, is currently underway, and we understand that an excellent rate of participation among the over 1200

individuals who served in that unit is being experienced. The study is composed of three elements; a mortality study, a morbidity study, and a follow-up. The questionnaire involved in this investigation is being administered under contract by the Harris Organization, and the physical examinations and laboratory studies are being conducted by the Kelsey-Seybold Clinic in Houston, Texas on a contract basis. The results of this study should be known by late 1983.

The Center for Disease Control in Atlanta is conducting a study that is designed to determine whether or not veterans who served in Vietnam are at a higher risk of producing offspring with serious birth defects. The test population consists of approximately 7,500 babies with birth defects born in the Atlanta area between 1968 and 1980, the identity of which were extracted from the CDC birth defect registry. Where possible, the parents of the subject babies are being interviewed to determine the factors which may be responsible for the occurrence of the abnormalities, including service in Vietnam and possible exposure to toxic substances which may be attributable thereto. Reportedly, CDC is experiencing a good participation rate in this study, and the results are exepected to be available by the end of 1983.

It should be noted that in both the Ranch Hand and CDC Birth Defect studies the use of control groups have been implemented.

The Armed Forces Institute of Pathology, since 1978, has been collecting pathologic material, including tissues extracted during surgical procedures and during autopsy procedures of Vietnam veterans, from VA medical centers, Armed Forces hospitals and from medical facilities in the private sector, for the purpose of surveying the illnesses that have been incurred by these Vietnam veterans. It was recently reported that 800 cases have been submitted to AFIP to date, and a total of 249 different diagnoses have been made. It has been proposes that matched controls be developed using cases of veterans treated in the same VAMCs from which the samples were submitted, and who did not serve in Vietnam. To do so will require a close cooperative effort between VACO and AFIP. We are not epidemiologists. However, the Legion does recognize the importance of the use of matched controls for comparison purposes in a significant study of this nature, and we would certainly urge the cooperation of the two organizations in this effort.

The Veterans Administration has begun preliminary work on a Vietnam veteran mortality study which will draw a comparison of death rates and the causes of death between groups of veterans who served in Vietnam and those who did not. VA estimates that this study will be completed in mid 1984.

An identical twin study is currently being designed by the VA at the St. Louis VAMC. The proposed study will compare a significant number of pairs of twins; one of whom served in Vietnam and the other who was in the military but was not in RVN, to examine the effects of the Vietnam experience. This study is expected to be concluded in late 1984 or early 1985.

Ten additional research projects have recently been approved by the Administrator of Veterans Affairs, selected from proposals submitted by individual investigators working in VA medical centers, in response to a request for new research proposals issued by VA Medical Research Service, which specified a biochemical, physiological or toxicological focus on the delayed effects of exposure to Agent Orange and other herbicides. The research projects for the most part involve animal studies, but human tissue cultures will be analyzed in some of the experiments, such as biochemical studies of fat metabolism. The new projects are supported for up to five years with VA research funds in excess of $2 million.

The Government of Australia became involved in the issue of Agent Orange in late 1979, and at the present time a study of major birth defects and a mortality study are underway, and a protocol for a morbidity study is in the development stages. Approximately 45,000 members of the Australian Army, Navy and Air Force served in Vietnam.

Mr. Chairman, we have presented this compendium of major Agent Orange and related research projects to demonstrate the magnitude of the total effort being put forth to determine the possible consequence of exposure, which is illustrative of a much different scenario than the inert picture we apprehensively viewed when dioxin exposure first became an issue of great concern. However, as was previously stated, time is of the essence in this critical matter. Three years have passed since the enactment of Public Law 96-151, and even a pilot study has yet to commence. Now it appears that the majority of conditions are such that the Veterans Administration is prepared to proceed with this scientific study. The American Legion urges that VA act in an expeditious manner in the consideration and implementation of the NAS recommendations upon receipt thereof.

The basic policy of the Legion on this issue is that it is the responsibility of the United States Government to determine the health problems that may be the result

of Agent Orange exposure and be prepared to accept the consequences of its own actions regardless of what those consequences may be, and regardless of the cost.

Mr. Chairman, The American Legion is convinced that the Vet Center Program as established under Public Law 96-22, and extended under Public Law 97-72, is accomplishing the purpose for which it was designed, within the limits of the framework of the program. To expand on that statement, the reasons for which Vietnam veterans visit the Vet Centers seeking assistance have been categorized into sixteen definite problems. The problems expressed by the largest number of veterans seeking assistance are vocational in nature—employment and employment training—and in many cases the Vet Center teams are not prepared to deal with this problem, which is understandable, since the primary mission of the Vet Centers is to provide readjustment counseling. However, the Program Director and The American Legion's Economic Division staff have recently broken ground in this area, and it is hoped that increased involvement in employment problems will develop in the future.

Our Field Representatives visit the Vet Centers during site visits to VA medical centers throughout the country, and we report their findings to the officials responsible for management of the program, along with additional comments and recommendations where necessary. These reports, for the most part, have contained positive comments and have been complimentary of the program.

A total of 128,909 veterans have been seen at the Vet Centers during 541,481 visits. A substantial number of spouses and other family members have also received counseling.

Recent increases in the staffing of the offices of the Regional Coordinators should certainly prove effective in increasing the supervisory and administrative capabilities of these individuals. The Regional Coordinators have been besieged with problems since the inception of Operation Outreach. Because of the number of Vet Centers within their jurisdictions and the geographical locations thereof, it has been difficult at best for the Regional Coordinators to provide direct supervision and otherwise respond to needs of the teams for which they are responsible. This was compounded at one point in time when a 60 percent reduction of travel funds for program officials was experienced. The American Legion feels that the need for the additional staff was more than sustantially justified.

The Operation Outreach program has been expanded, and as of August 30, there were a total of 133 operational Vet Center and satellites. There are also over 300 contract providers of services currently on line.

We would like to offer one recommendation with respect to the guidance and training that is provided the Vet Center teams. In a small number of instances we have found that Vet Centers staff were not familiar with the VA Regional Office, the services available therein, and the proper procedures for applying for VA benefits. Likewise, there have been a few times that Legion representatives have found that responsible information on the issue of Agent Orange was not readily available.

It should be reiterated that these situations have been few in number. However, we feel that it is important that all team members be aware of the activities of the Regional Offices, have some knowledge of veterans benefits and how to apply for them, and be able to provide veterans with up-to-date information on Agent Orange.

In conclusion, the American Legion will continue to support the Vet Center program. It has proven to be effective in assisting a large number of Vietnam veterans in overcoming psychological and social problems stemming from their military service. A substantial percentage of those benefiting from the services available at the Vet Centers are combat veterans who have had a great deal of difficulty in making the adjustment from Vietnam service into a civilian society, and many are suffering from post-traumatic stress disorder and other problems related to their war service. The number of Vietnam veterans seeking help and counseling has increased, and it can only be hoped that those individuals bearing the greatest burdens will be able to be reached.

Mr. Chairman, that concludes our statement.

PREPARED STATEMENT OF PETER B. CURRIER, AMVETS DEPUTY NATIONAL SERVICE AND LEGISLATIVE DIRECTOR

Mr. Chairman, AMVETS deeply appreciates this opportunity to offer its views concerning the status and activities of the Federal Government concerning the issue of Agent Orange exposure.

Since 1977, the American veteran community, and indeed the world, has been aware of concerns expressed by Vietnam combat veterans over their exposure to the

various agents used as herbicides during the conflict. Many fears that long-term health effects of this exposure were voiced, and as a result, the Veterans Administration and Congress went to work to set up a procedure through which a Vietnam veteran could receive treatment and examination to alleviate these fears. Additionally, the Veterans Administration under the guidance of this body has undertaken a series of studies to determine if in fact there are any long-term health effects associated with human exposure to the various agents used during the Vietnam conflict.

These studies are now in motion and will, if completed, provide very useful information regarding the long-term effects of the various herbicides on our Vietnam veterans and will serve to provide information to the world about the health effects of human exposure.

At a briefing with the immediate past Deputy Administrator of Veterans Affairs and members of the Veterans Administration Environmental Medicines staff, AMVETS was privileged to learn of and comment on the ongoing efforts of the Veterans Administration to gather information on this issue. We were provided at that time with a packet which briefly outlined these efforts and were told at that time that approximately 82,000 Vietnam veterans or roughly 3 percent of those individuals who had served in Vietnam had been examined. Additionally, we were advised of the status and plans at that time to disseminate information to the field as well as gather information therefrom and basically we were satisfied that the effort to reach out to the Vietnam veteran and explain the issue and, therefore, alleviate some of the hysteria naturally associated with such an issue were of a positive nature.

Our concerns now center around the fact that in light of these activities, in light of the information activities of the Veterans' Administration as well as the ranch hand study, the CDC birth defects and military service in Vietnam study, the VA Vietnam veteran mortality studies, the Australian Vietnam veteran health study, and the VA epidemiologic study of Vietnam era veterans, there still remains to be a great deal of work done at bringing the Vietnam veterans in for the examination for the purpose of gathering some data on their present health.

It is our concern and we feel the concern of many others that a greater effort to accommodate the Vietnam veterans who must work day to day should be made. For example, many locations provide Agent Orange examinations only during the working hours of 8:30 to 4:30. Consequently, there is a portion of the veterans population which cannot take time off during the workweek or workday in order to obtain a free and comprehensive examination by the Veterans Administration. We feel a greater emphasis on providing these accommodations by the Veterans Administration is needed. In this way, a greater number of Vietnam veterans will be able to avail themselves of the Veterans Administration program and in turn will provide much needed data if for no other purpose than to identify themselves as combat veterans. There has been a stated problem in identifying those veterans who served in-country. By increasing the number of examinations, the Veterans' Administration will have a ready-made listing of Vietnam veterans on which to draw for other studies. We do not feel that such an outreach would affect the objectivity of these studies but rather would enhance them since it would allow the Veterans' Administration to locate these individuals on an ongoing basis.

There has been much good work done by local and state organizations in the area of identifying and encouraging the Vietnam veterans to come forward for the examination. However, the Veterans' Administration itself has yet to make a concerted effort to bring in these individuals. If AMVETS were to offer one criticism of the process surrounding the Agent Orange examination, it would be that the Veterans' Administration has yet to become active in the outreach effort. We feel that the present day statistics of 91,000 combat veterans who have been examined or less than 4 percent of the individuals who served in combat is unacceptable. Since the previously mentioned meeting, at which time we were told approximately 3,000 individuals were being examined per month, there has been less than 1,600 per month being examined. At this rate, it will be many years before sufficient data is gathered by the Veterans' Administration on which to draw any conclusions as to the long-term health effects. Indeed, to contact these individuals now while their health history is reasonably fresh in their minds would seem to be, although not ideal, at least desirable.

Mr. Chairman, one can cite all sorts of statistics, numbers, and emotional information regarding this very volatile issue. The bottom line is, however, that concomitant to the ongoing gathering of information by the Veterans' Administration a gathering of information on the veterans through examination needs to be done. As previously mentioned, the benefit derived here would be twofold: first, there would be some reflection of the recent past health history of the veterans as well as identi-

fication of existing problems and two, a ready-made registry of Vietnam veterans would be established and, therefore, would provide a followup mechanism on which to make studies of the health trends of those combat veterans. AMVETS is supportive of the efforts shown by the Veterans' Administration to date as regards the various studies to be undertaken. We only hope and, therefore, request of this Committee that an effort be made to somehow insulate this program from the austerity measures of the present Administration. Recognizing that these studies are of necessity long-term in nature, we feel it would be a shame to suspend them either now or in the future.

We would also ask this Committee to undertake an effort which will ensure that the Veterans' Administration will actively seek Vietnam veterans for their examinations. This is as opposed to the present approach which simply opens the doors to examinations. We would like to see the Veterans' Administration actively seek to identify the various individuals in their community who served in Vietnam and, therefore, may have been exposed.

Mr. Chairman, AMVETS, as have other organizations and agencies has published an Agent Orange Self-Help Guide which is made available upon request to any veteran who desires information on the issue. We take the position that Vietnam veterans should avail themselves of this opportunity to be examined by the Veterans' Administration if for no other reason but for peace of mind. These community-based organizations such as AMVETS and the other veterans service organizations can only do so much however. The Veterans' Administration by its very nature can do a lot and we feel should. We hope this Committee listens closely to the comments of the individuals who appear before it today and then by its actions seeks to step up the gathering of information through examinations at VA Centers nationwide.

Mr. Chairman, again, we appreciate the opportunity to express our views as always, and this completes our testimony.

PREPARED STATEMENT OF PHILIP R. MAYO, SPECIAL ASSISTANT, NATIONAL LEGISLATIVE SERVICE, VETERANS OF FOREIGN WARS OF THE UNITED STATES

Mr. Chairman and members of the subcommittee, thank you for the opportunity to present, on behalf of the more than 1.9 million members of the Veterans of Foreign Wars of the United States, our views with respect to oversight of matters relating to the use of herbicides in Vietnam.

First, Mr. Chairman, we would like to commend the members of this Subcommittee as well as the members of the full Committee for their efforts in securing the passage of what is now Public Law 97-72, the Veterans Health Care, Training and Small Business Loan Act of 1981. As you know, provisions of that law authorized eligibility for basic health-care services by the Veterans' Administration for a veterans' disability where such may be related to exposure to dioxin or other toxic substances found in herbicides or defoliants used in Vietnam.

In that connection, complaints received from veterans concerning treatment under the provisions of that law have been, according to the best information available to us, resolved at the local level. We are aware of a number of cases where veterans have been called back to medical facilities for further testing and treatment. It should be noted, however, that genetic counselling (even though a presumption of exposure has been acknowledged) is still not available to veterans, either within the VA system or through fee-basis means.

In addition, Mr. Chairman, Public Law 97-72 authorized the Administrator to expand the scope of the epidemiological study mandated by Public Law 96-151 to include additional factors such as exposure to other herbicides, chemicals, medications, or environmental hazards or conditions. At our recent National Convention, the Administrator addressed this issue by saying:

"When I came to the Veterans' Administration—a little over a year ago—one of the first programs I reviewed was Agent Orange. I found our research stuck on dead center. People had good intentions, but nothing was happening.

"So I appointed an Agent Orange Task Force . . . created an Agent Orange Research and Education Office . . . and strengthened the Office of Environmental Medicine. These offices are now working—full time—on medical and scientific research projects to help resolve the complex and troubling issues associated with exposure to Agent Orange.

"To that end, I recently approved a $5 million Agent Orange Budget Program for this year. And I will petition the President and the Congress for another $7.7 million over the next two years.

"I am particularly proud to say that this is the first comprehensive Agent Orange budget prepared by any Administration."

Mr. Chairman, it is our view that the Administrator is still correct—people may have good intentions, but nothing is happening. We believe the management of the effort to resolve herbicide related issues is suspect; this is borne out by the inappropriate definition of the scope of the proposed protocol and the apparent confusion regarding its implementation. When one attends Advisory Committee meetings, he may be enheartened by the enthusiastic discussion of the number of related studies going on (or planned) throughout the world. But one is also disenchanted by the apparent lack of purpose and direction exhibited when it comes to the advancement of our own efforts to resolve the questions many Vietnam veterans have relative to their health.

It should also be noted, Mr. Chairman, that the synergistic effects of other herbicides, etc., utilized in Vietnam has not, in our view, been considered in proper perspective. We reiterate our views regarding this issue, first brought to another Subcommittee's attention on July 22, 1980: "We suggest that a meaningful and scientific investigation into the health problems experienced by some Vietnam veterans should not rule out the investigation of the possible ill-effects of all these [herbicides, insecticides, the use of Dapsone] collectively, as it is well known that all were used in Vietnam simultaneously."

Mr. Chairman, one also cannot be unmindful of the manner in which Australian Vietnam veterans are being dealt with in these matters. Even though scientific evidence has not shown a definitive causal relationship between the health problems of Vietnam veterans and the use of herbicides in Vietnam, compensation claims are being adjudicated in favor of veterans and health care and counselling for them, as well as their dependents, has been authorized and implemented.

Further, Mr. Chairman, we again salute the assistance and cooperation toward the resolution of these issues exhibited by the Department of Defense, particularly its Research and Rulemaking Branch. We note that work to develop a cohort (or a suitable group of Vietnam veterans) was begun by the Department of Defense and, after two weeks in time, computer time, and the involvement of numerous personnel, the VA requested that the work be halted due to changes to the cohort being developed. It remains obvious to us that an acceptable cohort for investigative studies will be brought forth by that agency, in an expeditious manner, once the final authorization is given.

We would also note, Mr. Chairman, that the incomplete state of the protocol and the apparent problems arising as to what to do with it compel us to register our concern as to the validity of the questionnaire currently being studied by the National Academy of Sciences. It seems to us that information incidental to a particular protocol should be sought; where there is confusion with respect to the protocol, there would also be doubts raised as to the viability of the questionnaire.

With respect to the recent change in the Vet Center organization structure and funding status, we applaud the application of the funds that could not be utilized in the contracting aspect of that program to the VA Nurses Scholarship Program. At the same time, however, we would register our concern that adequate planning was not accomplished to utilize these funds as originally intended, particularly on behalf of Vietnam veterans who live in more remote areas.

In conclusion, Mr. Chairman, we must protest the confusion that exists as to how and when the resolution of the herbicides/health decrement issue will come about. From our vantage point, it appears to be buried in a bureaucratic malaise. We find it unsettling to continue to be given varying time frames for progress, and longer than necessary time frames for the gathering of information. Why must we endure continual delays? Are such in the interest of science, or planned procrastination?

Again, Mr. Chairman, we suggest that the resolution of this issue be made a matter of highest governmental priority. We request that necessary funding and resources be kept available for such a purpose; that meaningful progress toward such be encouraged by the Congress. Should such efforts not yield meaningful results, we would urge the Congress to continue to exhibit the great concern and empathy towards this nation's veterans that it has, gratefully, in the past.

Mr. Chairman, we commend your obvious interest in and concern for our veterans. This concludes my statement and I would be happy to respond to questions you may have.

PREPARED STATEMENT OF LEWIS M. MILFORD, ESQ.

Mr. Chairman and members of the subcommittee, my name is Lewis M. Milford. I am a lawyer with the National Veterans Law Center in Washington, D.C. I am also on the faculty of the Washington College of Law, American University. The center is a public interest law firm which represents veterans in Federal court litigation and in Federal administrative hearings. The center has been involved in the Agent Orange controversy since 1978. I am testifying today on behalf of the Center and the National Veterans Task Force on Agent Orange.

Mr. Chairman, I am grateful for the invitation to testify about the status of the Agent Orange health study ordered by Congress in the Veterans Health Programs Extension and Improvement Act of 1979, Public Law No. 96-151, 93 Stat. 1097. The law was enacted in December of 1979.

Almost three years have passed since Congress ordered a reluctant Veterans' Administration to study the effects of Agent Orange among Vietnam veterans. At that time, there were several important questions that faced the VA. Whether it was possible to determine who was exposed to Agent Orange was a threshold question. If this could not be answered, a study simply could not be done. Who would conduct the study was a question left open by the law. An answer would be crucial to the study's credibility. How long it would take to have study results also was in doubt. Without some idea of when the study would produce results, no effective medical care or compensation policy would likely be made by the government. Moreover, a failure to deliver prompt answers would erode further the public's confidence in the government's willingness to get to the bottom of this public health crisis. Repeated delays and broken promises would only add to charges that the government is adamantly opposed to finding that Agent Orange harmed U.S. military personnel.

As we approach the third anniversary of the passage of health study legislation, we are no closer to getting answers to these questions. Instead, we have witnessed government bungling and ineptitude. The pattern of VA conduct is all too familiar. In most areas, the VA ignored the constructive proposals of its critics, only to concede months or years later that the suggestions had merit. We are sorry to report that the VA's incompetence, and perhaps malfeasance, has worked to defeat the will of Congress to find answers to the Agent Orange question.

We all know the sad history that surrounds the VA's attempts to hire a scientist to design the study. Dr. Gary Spivey, the scientist retained by the government, made clear his opinion that "fear" would be the most serious result of Agent Orange exposure. This was not a flippant, off-the-cuff, remark about the possible effects of exposure, but part of his prepared testimony presented to the California State Legislature. That controversy only began what has become a series of misguided attempts to get the study off the ground.

An epidemiological study can begin only when similar groups of exposed and non-exposed veterans are selected. Before Congress ordered the study, the government said that there was little chance that veterans were exposed to the herbicide. The study required the government to address the question. For over two years, Richard Christian and his staff at the Defense Department strove to compile records on troop movement and exposure. But he did so without trained epidemiological assistance. No one in the government evidently saw the need to develop a protocol for an exposure index to guide the record search. Critics of the agency testified before the Senate last year that such assistance was absolutely essential. These proposals were ignored by the VA for the past year.

It was only three weeks ago that the VA announced the formation of a science group to prepare a sound exposure index. Several months will pass before an index will be ready, if one can be prepared. And it will take at least six more months for the Defense Department to implement the protocol in record searches. Another year will be wasted on work that should have started three years ago.

Three years into the study and the VA has not decided who will conduct it, the agency or an outside contractor. The VA has refused to answer this critical question. The approach seems to be to avoid the question long enough and advance the study to a point when only the VA can complete the work designed by others. This Committee should compel the VA to address this question before it is far too late to decide whether another entity could conduct the study. Although it should be said that the events of the last three years suggest that few truly independent and fair-minded scientists would now have anything to do with the study.

At the most recent VA advisory committee meeting on Agent Orange, the agency announced that the study would not produce results until 1988 or 1989, at the earliest. I do not believe that Congress expected that a decade would pass before the VA was prepared to provide answers about Agent Orange. This delay is absolutely inex-

cusable. As planned, the study is designed to last about as long as the Vietnam war itself. This result might be acceptable if it were not for the fact that thousands of persons are living now with terrible uncertainty about their health. And it would be easier to accept if it appeared that the delay is the result of trained and skillful professionals running up against unexpected difficulties. But that is not the case. Every difficulty raised by the VA to justify inaction was clearly a problem that was obvious before Congress ordered the VA to undertake the study. The VA has not raised any unexpected problems that were not evident three years ago.

It is hard to understand, for example, why the VA never has hired a full-time epidemiologist to advise it on the study and related Agent Orange matters. Even at this stage, such a hiring decision was merely mentioned as a possibility at the last advisory committee meeting. It is also difficult to accept the secrecy that has surrounded the conduct of the study, particularly the details of the Spivey protocol. Significant portions of the congressionally mandated study design never have been released to the public. The reason given is that if veterans knew the purpose of the study design they would intentionally report diseases that they do not have. Many epidemiologists reject this type of scientific paranoia. They feel that full disclosure of the design only enhances the chance that a sound design is prepared and an effective study is conducted. This excessive secrecy even prompted a Center for Disease Control scientist to refuse to attend a VA meeting that was closed to the public so that secretive discussions about the protocol could be conducted. This secrecy has plagued every VA Agent Orange effort; it has contributed significantly to the measure of distrust that now exists among those who are supposed to participate willingly in a VA-sponsored study. There is no question that the refusal to release the protocol for full public review has resulted in successive reworking of a poor protocol design. Moreover, the full diversity of scientific opinion is sadly missing from the debate over the protocol, a fact that further undermines the study's credibility.

If these problems were resolved quickly, there still would be no real study underway for at least eighteen months. Rather, the plan calls for the VA to sponsor a pilot study to determine whether the study could be accomplished. Although this would probably astonish most veterans and their families, the VA after three years still does not know whether the study can be done at all. The study design tentatively accepted by the VA provides that there will be a pilot study conducted first. Only if the pilot study shows that the actual study is plausible will the real scientific work begin. The VA will not solicit contractors for a pilot study until the end of this year. Given the history of delays, this year and a half pilot study will take considerably longer. But more important is the question whether the pilot study should be done at all.

RECOMMENDATIONS

(1) We are not convinced that a pilot study is absolutely necessary. We raise this concern for several reasons. As we understand the protocol, a pilot study in all likelihood will tell us either that a full study is feasible or that there are significant problems with doing a full scale health study. The pilot may of course suggest that no health study can be done. With either result, this Congress and the VA would then decide whether to go forward with the full scale study. We find it hard to believe that this government would decide not to embark on a health study, given the history of this controversy.

If this is the most likely thing to happen, we question whether a rather elegant and extremely time-consuming pilot study is the best approach. A pilot would probably produce some insight into the proper conduct of a full-scale study. However, we do not believe that the public would be satisfied with a government decision to abandon the Agent Orange study, regardless of the difficulties that might be raised by the pilot. For this reason, we suggest a scaled down review of the likely difficulties of conducting a study, rather than more years of study as to whether a health study can be done.

(2) We reiterate our opposition to the VA's conduct of any Agent Orange health study. Its bias and incompetence demonstrate an unwillingness and inability to find the answers demanded by our nation's veterans.

(3) We also propose that Agent Orange compensation and medical care be provided during the pendency of the health studies. The VA is asking veterans and this Congress to wait for perhaps a decade for definitive answers to whether Agent Orange has caused health problems. During that time, veterans will have their disability benefits denied and many will be forced to resort to Social Security, welfare and other forms of public assistance to survive. We endorse the bill adopted by the Senate last year that mandates the VA to propose formal guidelines for compensa-

tion of veterans exposed to Agent Orange. This would require the agency to explain the standards used to deny claims.

This Committee should know that the Government of Australia has awarded disability benefits to approximately 70 percent of veterans who filed clains for Agent Orange related disabilities. This information comes from the Minister of Veterans Affairs who testified at the last VA Agent Orange meeting. The Australian compensation scheme shows the unfairness of the Va system. In Australia, the government has the burden of disproving that veterans' health problems are caused by Agent Orange. The burden is fairly placed on the party with the most information and expertise about the issue. The VA, on the other hand, unfairly places the burden on veterans to prove the cause of their injuries. As a result, all claims have been denied on the grounds that Agent Orange is the cause.

In a public rulemaking on Agent Orange guidelines, the VA would be required to explain the basis for its current compensation scheme in Agent Orange cases. Thus far, the VA system has been closed to the public and lacking in more enlightened compensation approaches.

CONCLUSION

The Center proposes these changes to improve a disturbing situation. These suggestions do not signal a weakening of our strong opposition to the VA's involvement in any VA Agent Orange study. We said three years ago that the VA had neither the competence nor the credibility to be responsible for a health study of this magnitude and complexity. The events of the last few years unfortunately have borne out our worst fears. However, unless amended, the legislative decision stands. These suggestions cannot rectify what remains an intolerable situation for Vietnam veterans. They are forced to hope for answers from a scientific effort in which they have little faith.

PREPARED STATEMENTS OF LESLIE A. PLATT, SPECIAL COUNSEL AND JOHN F. TERZANO, LEGISLATIVE DIRECTOR, VIETNAM VETERANS OF AMERICA

Mr. Chairman and Members of the Committee, I am Leslie A. Platt, a partner in the law firm of Coan, Couture, Lyons, & Moorhead in Washington and special counsel to the Vietnam Veterans of America. With me today is John F. Terzano, Legislative Director of VVA. We appreciate this opportunity to appear before the Committee on behalf of the Vietnam Veterans of America to present our views on the quality of medical care being afforded Vietnam veterans under Section 102 of Public Law 97-72 in Veterans' Administration facilities. Additionally, we would like to comment on the status of the Federal government's efforts to study the health of Americans who served in the U.S. Armed Forces in Vietnam, particularly focusing on those studies which are examining possible long-term adverse health effects as a result of exposure to Agent Orange.

We believe the Congress took an important step in Public Law 97-72 to recognize that many of America's Vietnam veterans may be suffering health problems as an unfortunate legacy of their Vietnam service. We are concerned because a number of reports from VVA members, as well as from other veterans, indicate that the Veterans' Administration's implementation of this statutory medical care directive has been spotty and uneven. Some VA medical staff and facilities are providing first-rate care. However, other VA personnel and facilities appear to be falling short of minimum acceptable performance. A number of witnesses before this Subcommittee and elsewhere have documented instances of this underperformance. Suffice it to say that only constant diligence on the part of this Committee and the entire Congress can assure that this directive to the VA is carried out in a consistent, competent, and compassionate manner.

The General Accounting Office is in the final stages of its review of VA policy and actions on Agent Orange. This report is expected to include a thorough review of VA actions under Public Law 97-72 and thus should provide a definitive accounting of VA practices in this regard. We urge the Veterans' Administration to move immediately to bring all VA health care personnel and facilities into full compliance and to establish an independent monitor of its performance in providing medical care under Public Law 97-72. This monitor could be through the existing VA Advisory Committee on Herbicides or a new group expressly established for this purpose. Indeed, an outside monitor would be extremely useful in assuring accountability. It has been almost one year since this provision became law. Too many Vietnam veterans apparently are still being treated by VA personnel and facilities as if the law were not on the books. This cannot be permitted to continue.

Regarding Agent Orange research, we would note that until the original Interagency Work Group to Study the Possible Long-term Effects of Phenoxy Herbicides and Contaminants was established in late 1979, there was little good that could be said about the Federal Government's commitment to a comprehensive research program. The Vietnam Veterans of America has repeatedly stated its support for the original Interagency Work Group and for the current Agent Orange Work Group. We also believe that the upgrading and expansion of the Work Group was a positive step and important evidence of a genuine continuing Federal commitment.

There is no doubt that the Federal agencies involved in the Work Group effort have committed extensive personnel and financial resources to the effort. There is also no doubt that much progress has been made since early 1980. Additionally, there is no doubt that a number of first-rate government scientists have spent an enormous amount of time on the Work Group's effort.

The Work Group was established expressly to take a leadership role in developing, overseeing, and coordinating a comprehensive Federal research program. For that reason, the Work Group was charged with the responsibility of pursuing aggressively the earliest possible undertaking and completion of all necessary research so that the information developed would be useful to the Congress and the Executive Branch in addressing the basic questions of social policy presented by the Agent Orange issue.

Mr. Chairman, it has been two-and-one-half years since the Work Group began. Much has been accomplished. The Air Force Ranch Hand Study and the CDC Birth Defects Study as well as a number of other studies, are underway. However, it seems to us that a serious, although somewhat subtle, shift in responsibilities may be taking place.

The Work Group charter expressly charges it with responsibility for leadership. Yet, a series of lengthy delays have occurred in getting the VA epidemiological study started.

Similarly, completion and demonstration of methodology for selecting ground troops for study and control cohorts still has not been undertaken, although the Defense Department has been ready for sometime to conduct that work. Indeed, several years have elapsed since identification of the need for development and verification of record search techniques to establish scientifically valid study cohorts. The Army's Agent Orange Task Force has made an enormous effort virtually unaided has overcome considerable technical difficulties, and actually had begun to conduct a pilot program to be completed by the end of this calendar year to demonstrate the viability of constructing cohort groups differentiated on the basis of exposure vesus nonexposure. However, literally months of intensive preparation and briefing of the Work Group, and after that work had actually begun, objections to the Army's test program were raised and the program was stopped. Again, the result has been needless confusion, delay and frustration.

Also, while the VA clearly has long-needed inhouse epidemiological capacity, it still has no trained epidemiologist on board to help guide the agency with this issue. Time and again the difficulties lately encountered in moving forward seem to have overpowered the scientists' determination and commitment.

We would submit that the Work Group has a responsibility to find ways to overcome obstacles—excuses will not suffice. The time has come to return to the basic framework and purpose of the Work Group. Accordingly, the VVA believes the Work Group should be asked by this Committee to take several concrete steps to bring it back to basic purposes.

First, the Work Group should immediately prepare and submit to the Congress and the public a detailed report of overall progress made under, and the status of research, regarding, each of the elements of the interim research agenda set forth in the spring of 1980, which was reviewed and endorsed by the National Research Council of the National Academy of Sciences. This report should go beyond a chronology of activities. It has been over two years since that agenda was formulated and its is important that the Congress and the public have a comprehensive specific accounting of progress made in carrying out the agenda.

Second, the Work Group should update the report on the state of scientific knowledge about Agent Orange, prepared by the Work Group and made public in the summer of 1980. With these two reports in hand in the next several months, the Congress, the veterans, and the public at large will know what has been accomplished and what is now known.

Third, the work group should hold a public meeting. The last and only public meeting of the Work Group was held in September 1980. The time has come for an open dialogue with interested veterans, non-Federal scientists, the press, and the public about the state of the Federal research effort. The September 1980 Work

Group public meeting was well attended and afforded a wide range of veterans organizations, interested scientists, and individual veterans to listen and to discuss the Federal research program. Indeed, several useful research suggestions came out of that meeting. Veterans appreciate the opportunity to discuss openly with Federal officials something of direct and substantial concern to their lives.

Fourth, the Work Group should resume the issuance of regular progress reports. This practice has been replaced by the intermittent releasing of sanitized, chronological activity synopses.

Fifth, the Work Group should develop with active participation of VA representatives a concrete, specific timetable for each stage of the VA's epidemiological study, and this timetable, together with updated, complete timetables for all other Federal research should be made public within the next month. In this regard, we continue to stand ready to help marshal the grass roots veterans' support for active participation in the VA's epidemiological study when it actually gets underway.

Taken together, these limited steps will prove extremely useful in assuring accountability on the part of the VA and other agency participants, and will provide once again important leverage to the Work Group in overcoming any tendency on the part of the VA or other agencies to revert to business as usual. The major strength of the Work Group has always been its ability to overcome obstacles and resistance in order to get the job done. That strength has largely been the result of public accountability through regular reporting.

The Work Group must once again find that strength and demand agency performance. A prime example of what must be is an enormous frustration for Science Panel members is the fact that the Science Panel completed in March its review of the revised UCLA protocol. The Science Panel recommended in March that: "[t]he selection of the cohort for the Pilot Study should immediately proceed as well as the quality control and quality assurance procedures . . ." That was March, and it is now September, yet the VA has still not started.

When the Work Group began, it assumed an enormous burden of responsibility. It cannot—it must not—allow VA or other agencies to impose bureaucratic obstacles which frustrate the completion of its mission.

Another aspect of returning to basics, Mr. Chairman, is to recognize two key facts. First, even at maximum speed, this research program will take a number of years before it is completed. While some preliminary results are expected next year, the VA's epidemiological study will not provide useful information for a number of years to come. This immutable fact underlines the need for a comprehensive reporting now of what is known and the firmest possible commitment to completing the job.

The second point was spelled out by Joan Z. Bernstein, the Chair of the original Interagency Work Group, in testimony before this committee in February 1980, shortly after the IWG was formed.

In that testimony, Mrs. Bernstein stated:

"The mission of the work group is essentially scientific. It may discover that members of Armed Forces who served in Vietnam run a greater risk than other groups of contracting serious diseases. But it may also find that the origin of any such diseases is not peculiar to a given chemical or to the Vietnam experience.

"If these are the findings, they will not tell us at what elevation of risk a veteran's illness should be deemed service-connected, or if the United States should assume responsibility for compensating the Vietnam veteran or his survivors for illness should the increased risk be very small.

"They will not assist us adjusting the equities between those Vietnam veterans and non-Vietnam veterans who contract similar ailments, or between veterans and other members of the public.

"Finally, they will give only tenuous guidance on the role that government should play in ameliorating the adverse consequences of dioxins to the health of the public at large.

"I do not raise these difficult questions in order to answer them. I raise them because I am concerned that the intense public discussion to date about the design, objectivity and timeliness of research on this subject may be creating or contributing to an erroneous impression. Because of the controversy, many may have come to believe that once an optimal research agenda is established and carried out, the research results will provide definitive, incontrovertible scientific information about the health effects of phenoxy herbicides and their contaminants.

"I believe this is an unfortunate view because even the best effort of which our scientists are capable may not produce such conclusive results. In short, we may be left, after the research is done, with many of the same social policy issues we face today. Nevertheless, we believe the research being carried out or planned is impor-

tant and valuable. We hope it will help all of us formulate a fair and humane social policy. But it will not and cannot by itelf answer questions that seem to us to be fundamentally ones of broad social policy that both the Administration and the Congress must soon confront."

Mr. Chairman, it has been two-and-one-half years since that testimony and its recognition of fundamental realities is as relevant today as it was then.

VVA strongly believes that the time has come for Congress to take another step in recognition of these two fundamental realities.

In 1979, the 96th Congress took a major step toward dealing responsibility with this issue by mandating the Veterans Administration's Epidemiological Study and a worldwide literature review. In 1981, the Congress took another important step forward in Public Law 97-72 by affording veterans priority medical care for illnesses or disabilities that may be related to Agent Orange or dioxin exposure in Vietnam. Both of these actions were taken in express recognition of these realities. VVA believes the time has come for Congress to take another step forward.

Specifically, we recommend a three-part approach. First, we urge that the Congress, by statute, recognize both chloracne and soft tissue sarcoma as presumptively service connected. Scientific evidence on the presence of chloracne as a clear indicator of exposure to toxic chemicals is overwhelming, as attested to by the VA itself. In addition, the scientific literature on soft tissue sarcomas from both animal and human studies is more than adequate to support a presumption of service connection where this relatively rare condition exists in a Vietnam veteran.

Second, we urge the Congress to complement the medical care eligibility provision in Public Law 97-72. We believe a limited program of compensation for veterans suffering significant adverse health affects that may reasonably be presumed to have resulted from service in Vietnam from exposure to Agent Orange, or otherwise, can and should be implemented now, by the Veterans Administration. Specifically, we propose limited eligibility for compensation for serious health related disabilities presumed to have resulted from, or been aggravated by, service in Vietnam. Such eligibility would be determined and circumscribed by criteria to be prescribed by the VA Administrator after consultation with an outside advisory committee, comprised of knowledgeable and non-Federal scientists and veterans representatives.

Compensation would be available only for serious debilitating conditions. Compensation should be made available for the same period as is prescribed in the medical care eligibility in Public Law 97-72; i.e. until one year following the submission of the Administrator's first report on the Veterans Administration epidemiological study, or such earlier time as scientific research indicates that temporary compensation for a condition is inappropriate. This approach would follow the broader action taken by the Government of Australia where the burden of proof in determining eligibility for compensation in similar cases has been shifted to the government.

Further, this approach would provide equitable treatment for a number of veterans who had been waiting many years for government interests in their problems and who now must wait a number of additional years before permanent disability compensation decisions are likely to be made. This temporary compensation approach also would provide the added dividend of a direct incentive to the VA to move as quickly as possible to complete preparation for and actually to conduct its epidemiological study inasmuch as sick veterans will receive compensation until the VA has completed its job. It would be both reasonable and responsible to recognize the burden of the years and years of waiting that have already occurred and not simply to tell veterans they must continue to wait for the scientists to complete all aspects of their part of the job. Rather, we believe it would be responsible social policy for the Congress to afford relief to veterans until research results are in on the basis that they have a condition which reasonably may be said to be associated with their service in Vietnam.

Establishing limited, temporary compensation eligibility tied to the Federal research program would neither bust the budget nor the staff resources of the Veterans' Administration. If eligibility were limited as indicated above, only a limited number of veterans would be eligible for compensation. This temporary compensation authority program would expressly state that it is not to be deemed recognition on the part of the government of a scientific determination of a causal link between the veteran's condition and his or her service in Vietnam. Instead, eligibility would be provided on a temporary basis for those who may have suffered adverse health effects as a result of their service on the basis of a temporary presumption in favor of the veteran.

Third, these legislative steps should be coupled with legislation considered and passed by the Senate last year to establish a statutory framework requiring the VA

Administrator to promulgate regulations for a permanent resolution of claims for veterans' benefits based on exposure to Agent Orange.

In summary, this three-part approach would: Establish a specific presumption for chloracne and soft tissue sarcomas; create eligibility on a limited, temporary basis for compensation for other serious conditions which may reasonably be thought to have resulted from Vietnam service; and put in place now a statutory framework for the permanent resolution of veterans' claims.

Adoption of this approach would be concrete, demonstrable evidence of the commitment of the Congress and the Executive Branch to America's Vietnam veterans and their families.

In closing, we would like to compliment the Federal scientists who have worked so hard on Agent Orange research. In particular, we believe Dr. Vernon Houk, Chair of the Science Panel of the Work Group has done an extraordinarily competent job under very difficult conditions. Also, the Department of the Army Agent Orange Task Force, under the leadership of Richard Christian, by all accounts has done an outstanding job. Likewise, this Committee and its staff have earned the gratitude of the Vietnam veteran.

We urge, however, that the momentum and progress of the last few years not create a comfortable complacency of good intentions. The burden of proof and performance has indeed shifted to the government. Inaction now by the Congress or the Executive Branch would only prove a longstanding prejudice of many veterans and others that the government cannot—or will not—perform when the chips are down and the facts are on the table.

We thank you.

SPEECH BY MR. D. VOLKER, CHAIRMAN OF THE REPATRIATION COMMISSION AND SECRETARY OF THE DEPARTMENT OF VETERANS' AFFAIRS (AUSTRALIA), TO U.S. VETERANS' ADMINISTRATION ADVISORY COMMITTEE

INTRODUCTION

I am pleased to have this opportunity of talking to members of the Advisory Committee about matters in which we have a mutual interest. There is much to gain through sharing our experiences and knowledge.

GENESIS OF ISSUE AUSTRALIA

(2) Following Australian press reports on 13 December 1979 that United States veterans intended to sue chemical manufacturers, statements by Australian veterans began to appear in the local news media suggesting that their disabilities and the deformities in some of their children might be related to contact with Agent Orange and other herbicides in Vietnam.

INITIAL GOVERNMENT RESPONSE

(3) On 18 December 1979, the then Minister for Veterans' Affairs announced that his Department had been seeking all available information on the effects of herbicides, including of Agent Orange, on veterans who served in Vietnam. Any Australian veteran who had served in Vietnam and believed he had suffered a disability as a result of exposure to Agent Orange was invited to contact the Department. The request was repeated on 4 January 1980.

INDEPENDENT STUDY ANNOUNCED

(4) On 11 January 1980, Mr Adermann announced that the School of Public Health and Tropical Medicine (now the Commonwealth Institute of Health) at the University of Sydney would undertake an epidemiological study of the possible effects on veterans and their children of Agent Orange.

STUDY DESIGN

(5) The plan for the study put forward on 14 February 1980 envisaged interviewing all Vietnam Army veterans and their families (about 40,000 families) and a control group of 20,000 veterans who had not served in Vietnam (and their families). The plan referred to the need to look at all herbicides used in Vietnam and not just Agent Orange.

(6) On 31 March 1980, Mr Adermann made a statement in Parliament which announced: That the Commonwealth Institute of Health had been asked by the Gov-

ernment to press on with the study as quickly as possible; that expenditure on the study would exceed $2M and the study, in its major phase, would extend over some two years; greater details of the proposed study plan; the Government's rejection of an independent judicial inquiry requested by some ex-service organisations; and the intention to appoint a Scientific Advisory Committee to assess and endorse the methodology of the study.

(7) Work on the design of a pilot study was begun. The fieldwork, involving the proposed interviewing of about 600 families and the medical examination of about 300 of these families started in May 1981. In the event, through unavailability, refusal, etc., the number of male subjects from whom medical examinations were completed was reduced to 166.

CURRENT POSITION OF STUDY

(8) On 15 February 1982 the present Minister for Veterans' Affairs, Senator A. J. Messner, announced that, after carefully considering advice from the Commonwealth Institute of Health and the Scientific Advisory Committee, the Government had agreed to a revised work program put forward by the Institute. The new programme covered: A case-control study of congenital anomalies which would enable the incidence of major birth defects in Vietnam veterans' children to be compared with the incidence in children of veterans who did not serve in Vietnam and in children of the community as a whole: A retrospective mortality study—an investigation of the causes and incidence of death among Vietnam veterans and a control group; completion of the analysis phase of the pilot study for which the field work has already been done; and preparation of a protocol for a morbidity study of selected groups of Vietnam veterans and a non-Vietnam control group sufficiently large to produce valid results. Special consideration would be given to the very small numbers of Australian veterans who may have been exposed to direct spraying.

(9) The Institute argued against a comprehensive study of all Vietnam veterans and made the following points: An important reason for the earlier idea of surveying all veterans and families was the desire to generate a large enough sample size to enable the birth defect question to be answered. Since then, the Government had approved a separate case-control study which should throw light on the incidence of major birth defects in veterans' children more quickly than the major study originally envisaged as part of a comprehensive family survey; it was unlikely that an index of herbicide-exposure for all would be available either by linkage of Army movements and spray-mission records or by direct interview; evidence from exposure analysis that the average level of exposure of Australian troops to herbicides and dioxin was probably very low; and Regular Army Vietnam veterans and Regular Army soldiers of the Vietnam era who did not serve in Vietnam were not sufficiently comparable. This would make interpretation of any differences between the two groups difficult. On the other hand, National Servicemen who went to Vietnam were likely to be sufficiently comparable with those who did not go to form the basis for a valid study.

(10) Results from the birth defects study should be available by the end of this year. Those from the mortality study are anticipated by the end of 1983. A morbidity study would take a considerable time. Realistically, results would be unlikely any earlier than before two/two and a half years after acceptance of a protocol.

REPATRIATION SYSTEM

(11) Provision already exists within the Repatriation system for compensation to be paid and medical treatment to be provided for any veteran of the Vietnam War who has disabilities related to his service. It is not necessary under the legislation to prove the cause. A Determining Authority is required by the legislation to allow the claim "unless it is satisfied, beyond reasonable doubt, that there are insufficient grounds for granting the claim." In the event of a veteran's claim being rejected by a Repatriation Board (which comprises three members, at least one of whom must be an ex-serviceman nominated by an ex-service organization), the veteran may appeal to the Repatriation Commission and then to the Repatriation Review Tribunal (which similarly include ex-service representatives). In certain cases, the matter may be referred to the Administrative Appeals Tribunal or to the Federal Court. The various levels of determination are made by bodies that are independent of the Department.

(12) Many Vietnam veterans are already receiving compensation for their disabilities. As at 30 June 1982, about 7,000 of the 45,000 Army, Navy and Air Force personnel who served in Vietnam were receiving disability pensions as were about 14,500 dependents of these veterans.

CLAIMS RELATED TO CHEMICALS

(13) To the end of June 1982 a total of 1,177 Australian veterans had lodged claims for disability in which they mentioned possible contact with chemicals in Vietnam. Of these, 364 has been accepted by the Repatriation Boards. In virtually all of these cases, it was unnecessary for Boards to determine whether diagnosed disabilities were linked to exposure to chemicals. 219 claims were still to be determined.

TREATMENT PROVISIONS

(14) On 14 January 1981, Senator Messner, announced that, subject to spare bed capacity, hospital treatment would be provided in Repatriation hospitals to Vietnam veterans requiring urgent medical attention. The offer extended to all Vietnam veterans who presented to the Department for treatment in respect of a condition not accepted as related to their service.

(15) The Government took this action because of reports that some Vietnam veterans were seriously ill as a result of their service in Vietnam and that their states of mind put their lives at risk.

(16) On 15 February 1982, following a review of the decision to provide Vietnam veterans with urgent treatment in Repatriation hospitals, Senator Messner announced that the Government had decided to retain the benefit and to make two important extensions to it. The Government would now accept the cost of the urgent treatment of Vietnam veterans in country hospitals. If the veteran was insured, costs would be recouped from the health fund concerned. In addition the Government had decided that at no cost to the family, wives and children of Vietnam veterans may receive emergency treatment at Repatriation General Hospitals if such treatment was considered to be necessary by the Vietnam Veterans Counselling Service.

VIETNAM VETERANS COUNSELLING SERVICE

(17) In January 1981, an interim counselling service for Vietnam veterans was established.

(18) The service was operated by professionally qualified counselling officers located at central points in the Department of Veterans' Affairs to identify problems of Vietnam veterans and facilitate their access to existing community services, including Repatriation services.

(19) During his visit to the U.S. in mid 1981, the Minister, was impressed by the shopfront centres operated as part of the U.S. Veterans Administration's program of outreach to Vietnam veterans. On his return, he announced that he proposed to expand the interim counselling service and that he would be considering the incorporation of certain features of the U.S. outreach program.

(20) The Government has since established Vietnam Veterans Counselling Service centres in each State capital and in Darwin.

(21) All except one of the centres are located apart from Departmental premises. They are staffed by personnel who know Vietnam service well. The senior staff are fully qualified counsellors. The centres will provide professional counselling, both in terms of psychological and social problems, for the veterans themselves and for their wives and children. They are developing extensive contacts with other groups in the community which provide expertise in particular areas such as marriage guidance and employment.

(22) The Minister for Veterans' Affairs has been advised by members of a National Advisory Committee on the establishment of the Counselling Service. Four of the five members are Vietnam veterans and they include the National Secretary of the R.S.L. and the National President of the Vietnam Veterans Association of Australia.

SENATE COMMITTEE

(23) On 15 October 1981, the Senate requested its Standing Committee on Science and the Environment to examine the matter of pesticides. The terms of reference were:

"The use of pesticides, particularly phenoxy chemicals and chemicals containing dioxin with reference to: (*a*) their ecological effects; and (*b*) their effects on human and animal health; and that in considering the matter the Committee deal first with the possible effects on Vietnam veterans of exposure to herbicides."

(24) The Committee held four public hearing sessions (8/9 December 1981, 4/5 February 1982, 31 March/1 April and 25/27 May 1982). At these sessions it has re-

ceived submissions from individuals and representatives of various organisations, including the Department of Veterans' Affairs. It has questioned the individuals and representatives at each session. The Committee Chairman expects to present a report on the Vietnam veteran aspect to Parliament, within the next month or two.

[From Pesticide & Toxic Chemical News]

EPIDEMIOLOGICAL STUDIES LINK 2,4,5-T EXPOSURE TO CANCER IN HUMANS, EPA SAYS

A "growing body" of epidemiological evidence establishes a "clear association" between exposure to 2,4,5-T and dioxin and carcinogenic effects in humans, EPA asserted in its prehearing risk brief in the 2,4,5-T and silvex cancellation hearing (See separate stories).

According to EPA's Dorothy E. Patton, Office of General Counsel (OGC), four separate Swedish studies, with a fifth one expected to be published soon, link exposure to 2,4,5-T and TCDD to types of human cancer. She said the latest evidence by Swedish scientists L. Hardell and A. Sandstrom show "statistically significant increases in the risk of malignant mesenchymal tumors of the soft tissues (soft-tissue sarcomas) related to occupational exposure to phenoxy herbicides and to occupational exposure to chlorophenols."

Patton observed in a case-control study of the risk of soft-tissue sarcomas in a population in northern Sweden which includes forestry, sawmill and paper pulp workers, the researchers found that individuals previously exposed to 2,4,5-T and 2,4-D had relative risk for soft-tissue sarcomas 5.3 times greater than unexposed individuals.

Moreover, she noted that soft-tissue sarcomas are a rare variety of cancer and the case control study by the two researchers "is generally recognized as the most effective epidemiologic method for documenting the relationship between a particular causative factor and a rare type of tumor."

In yet another case control study in a different population in southern Sweden, her brief said, researchers M. Eriksson, L. Hardell, N. Bern and T. Moller found "that individuals previously exposed to phenoxy herbicides had a relative risk for soft-tissue sarcomas 6.8 times greater than unexposed individuals, thus, she noted, confirming and replicating the studies of the other Swedish researchers.

In two separate epidemiological studies of "cohort" railroad workers exposed to 2,4,5-T and TCDD, the EPA brief said each study "documented a statistically significant increase in the incidence of stomach cancers among such workers."

Cohort studies compare the incidence of disease among a group previously exposed to a chemical compared with a group not exposed to the chemical or exposed to a lesser degree.

Patton noted that in a recent update of an "inconclusive study of mortality and tumor incidence in a cohort study of Sewdish railroad workers" by O. Axelson, C. Edling, H. Klin, K. Anderson, C. Hogstedt and L. Sundell, the researchers found "a significant excess incidence of stomach cancer among those workers first exposed to phenoxy herbicides more than ten years earlier."

The update was based on an earlier study by O. Axelson and L. Sundell in 1974 called "Herbicide Exposure, Mortality and Tumor Incidence: An Epidemiological Investigation on Swedish Railroad Workers."

She noted that in the update of Axeslon, et. al. the individuals exposed to phenoxy herbicides had observed incidence of stomach tumors 6.1 times greater than expected after allowing for a ten year induction period. Furthermore, Patton argued that in a study of a cohort of workers exposed to TCDD at an accident in a trichlorophenol plant in Ludwigshafen, Germany, German researchers found "an excess incidence of stomach cancer among exposed workers."

Patton asserted these studies indicate that exposure to TCDD or preparations containing TCDD "has been clearly associated with an excess risk of stomach cancer in humans."

Using the findings of the EPA's Alsea study, coupled with the latest epidemiological studies, Patton concluded:

"Statistically significant increases in the risk of cancer and reproductive disorders have been documented in six separate human populations. These same types of adverse health effects have also been observed in experimental animals exposed to 2,4,5-T, silvex and/or TCDD. This combination of positive epidemiological findings and corroborative ainmal data provides a sound basis for the conclusion that exposure to pesticide products containing 2,4,5-T or silvex constitutes a human health hazard . . .

"The quality, quantity and variety of data demonstrating that the continued use of 2,4,5-T and silvex contaminated with TCDD presents risks to human health is unprecedented and overwhelming."

In previous cancellation hearings such as heptachlor/chlordane which led to the cancellation of the pesticide, she argued, cancellation was based on carcinogenic evidence in rodent test systems with other toxic effects in test animals not available.

FINAL SAP DIMETHOATE REPORT ISSUED; DIFFERS FROM DRAFT

The final FIFRA Scientific Advisory Panel (SAP) report on dimethoate, dated Feb. 7, differs from the draft in a number of areas, but, most importantly SAP goes along with EPA's proposal to require warning statements on labels specifically alerting female workers involved in air-blast application practices to the potential teratogenic effects of the pesticide (See Jan. 30, Page 21). In the draft report, the panel had disagreed with that labeling requirement proposed by the agency.

SAP's final report also modified the language of the panel's rejection of the EPA proposal which would prohibit the use of air-blast equipment on citrus, pecans and some fruits. The draft had warned that if dimethoate were not available for this type of application, more hazardous pesticides such as parathion would be used. The final report said, ". . . If dimethoate is not available then it is likely that substitute pestticides which may be more hazardous may be selected for use in air-blast equipment."

As in the draft, SAP's final report reject EPA's proposed prohibition of the convention use of human flaggers to mark swaths in aerial spraying and the associated requirement for use of automatic flagging devices.

SAP revised some of its answers to specific questions EPA had asked. In the final report, the panel's answer to the question about the significance of polydactyly was shortened from the draft version to read, "The significance of polydactyly cannot be properly assessed. The panel is unaware of data which clearly relate the phenomenon of polydactyly as a dose-related toxicological manifestation which is well documented in the literature. In Khera's study it is impossible to determine whether polydactyly was an effect attributable to the agent or whether it was a background effect."

EPA had asked SAP to suggest a method of estimating applicator exposure to dimethoate. The answer in the final report stated that in general SAP agreed with the EPA approach, but, the panel added, "In view of the biodegradability of dimethoate it is unlikely that the dietary level for this compound will approach tolerance levels. Additionally, the panel recommends that appropriate field human monitoring studies be conducted to determine applicator exposure levels. Such studies are technically feasible and should be considered as the best means to characterize potential hazards in humans."

The draft and final reports had identical comments on EPA's proposed additional testing requirements.

February and March SAP Meetings Set for Tucson, Ariz., Washington, D.C.—SAP's next meeting is scheduled for Tucson, Ariz., Feb. 21, 22. The panel is to consider draft reentry data requirements of the Section 3 registration guidelines.

[From U.S. Department of Health and Human Services]

A proposed design for a research study on possible health effects of exposure to Agent Orange by Vietnam veterans has been approved by a science panel of the White House Agent Orange Working Group.

HHS Secretary Richard S. Schweiker, who chairs the Cabinet Council on Human Resources to which the working group reports, said:

"With the incorporation of some recommended refinements, we feel the Veterans Administration now can proceed with a pilot study as the forerunner for a more comprehensive study of veterans who may have been exposed to Agent Orange while serving in Vietnam."

The research plan, designed by scientists at the University of California at Los Angeles, includes revisions of an earlier draft as mandated by the working group.

The pilot study will test the mechanisms to be used in the full study and work out any design problems. The main survey will involve some 18,000 Vietnam veterans.

This research into possible effects of Agent Orange exposure was mandated by Congress in 1979.

Schweiker said this study is only one of several efforts being made to find answers to this problem. Results are expected to provide the administration with policy guidance for action, and possibly new legislation if warranted.

"I regard this step and other research efforts in the Agent Orange field as major progress in resolving this problem," Schweiker added.

Other research efforts coordinated by the Agent Orange Working Group include:

Ranch Hand Study.—This is a special survey of some 1,200 Air Force personnel who were involved in Agent Orange spraying missions during the Vietnam war. Physical examination and questioning is being done with these flight crew members on a voluntary basis. Another 1,200 Air Force persons who did not participate in these missions are being examined as a control group. Preliminary results are expected in mid-1983.

Birth Defects Study.—HHS' Centers for Disease Control (CDC) in Atlanta expects to complete a study related to birth defects by September of next year. From a registry of 7,500 children with birth defects, CDC will isolate those born to Vietnam veterans to determine if these veterans have an increased risk of fathering children with birth defects. If so, CDC will attempt to determine if the increase is associated with exposure to Agent Orange.

NIOSH Toxic Study.—The Department's National Institute of Occupational Safety and Health (NIOSH) is looking into work place exposure of persons to Dioxin, a highly toxic contaminant formed during the manufacturer of the defoliant 2,4,5,-T, a component of Agent Orange.

Last July, President Reagan elevated the Agent Orange Working Group to Cabinet Council reporting status. The group oversees all research assignments and expedites funding for such research in the federal agencies involved.

With HHS as the lead agency, the working group has representatives from the Departments of Defense, Agriculture and Labor; the Veterans Administration; Environmental Protection Agency; Office of Management and Budget; Action; White House Office of Science and Technology; Assistant to the President for Policy Development; Council of Economic Adivisers; and, as an observer, the congressional Office of Technology Assessment.

THE WHITE HOUSE,
Washington, D.C., April 8, 1982.

Hon. CASPAR W. WEINBERGER,
Secretary of Defense,
The Pentagon, Washington, D.C.

DEAR MR. SECRETARY: The Agent Orange Working group (AOWG) of the Cabinet Council on Human Resources has the responsibility for overseeing, coordinating and setting priorities among Federal research relating to Agent Orange. In partial fulfillment of its character, the AOWC has been assisting the Veterans Administration (VA) in implementing an extensive epodemiology study to determine whether Agent Orange caused long term health effects in exposed veterans. This study was mandated by Congress in Public Law 96-151. It appeared until recently that it would be impossible to identify, with sufficient reliability, the exposure cohorts for this study.

Within the last six months, Department of Defnese (DOD) representatives to the AOWG working with the staff of the Army Agent Orange Task Force have succeeded in developing a model for searching DOD records to identify exposed and non-exposed Vietnam veteran cohorts. This concept was presented to the AOWG in December, and after continued refinement by the DOD, the concept was endorsed as a reliable method for identifying the Agent Orange exposure of certain units serving in Vietnam. We would like to compliment your staff for developing the solution to this critical problem.

The AOWG has recommended that DOD proceed with the search, retrieval, and establishment of the needed exposed and non-exposed Vietnam veteran cohort lists.

The AOWG recommends that sufficient DOD personnel and computer support be committed to begin the records search necessary to provide the Veterans Administration with subjects for the initial pilot study. After the pilot is completed, additional DOD staff and computer support will be needed to identify the 36,000 potential research subjects needed for the full Agent Orange epidemiology study. The AOWG estimates the total effort will require a DOD budget of $2-3 million over 1½ years.

I now forward to you the request that you review our recommendation and help to assure the priority, staffing and other support necessary to enable the DOD to develop these cohort lists in an expeditious manner.

Sincerely,

RICAHARD S. SCHWEIKER,
Chair, Pro-Tem, Cabinets Council on Human Resources.

P.S. Please call if you need any more background on this. The President asked me to take over this effort and give it a high priority after he met with the Veterans last year.

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE,
Washington, D.C., September 1, 1982.

VERNON HOUK, M.D.,
Chairman, AOWG Science Panel, Acting Director, Center for Environmental Health, Centers for Disease Control, Atlanta, Ga.

DEAR DR. HOUK: As per our phone conversation on Monday, the 30th, Mr. Christian, AAOTF, and I have reviewed your draft minutes of the Science Panel Meeting of August 19, 1982, and would like to provide the following substitution paragraphs beginning with the last paragraph on page 1 as follows:

After considerable discussion, it was decided that the Department of Defense (DoD) should continue on hold. The entire question of guidance to the AAOTF continues to be unresolved and under study by a subcommittee of this panel. Estimated date of completion of the report by these qualified epidemiologists is ————.

It should be noted that while these discussions are underway, time is being lost by DoD. However, the AAOTF continues to do work on building the Services HERBS tape and responding to litigation requirements and other pertinent service research.

The major issues yet remaining to be resolved are the individual criteria to determine eligibility, the exact distance it time to be called "a herbicide hit," and most important, a weighting scheme for exposure. These issues are addressed in a preliminary way in Tab D.

We still do not agree that it is necessary to have a distance of 15 kilometers separation from any spray track at any earlier time to consider that the unit is qualified as an "unexposed unit." We believe, as a result of the two studies passed out at the Science Panel from Fort Detrick and Eglin AFB that 5 kilometers is a reasonable distance and the period of 60 days from last spraying provides an exceptionally safe separation for any unexposed unit. We could probably be very safe with a 30 day post-spray period considering the half-life of dioxin in the open environment. Exceptionally wide separation distances such as 15 kilometers could seriously affect our ability to establish "unexposed" units that are really comparable to herbicide "exposed" units. These comparability factors would include: (1) same type of combat unit, (2) same type of fighting terrain, (3) same type of environment (latitude), and (4) within the same Corps area.

Further, some of the ideas advanced by the epidemiologists will have to be experimentally tried on a test case basis to make certain that we can do what we promise and that it is within the resources budgeted by the Army and within the capabilities of the personnel in the AAOTF using the existing records. We just do not want to promise things that may be impossible to deliver within the time schedules of the VA, nor do we want to start off on a false track in our research efforts because not all involved parties have given final approval to a detailed research plan.

This letter has been coordinated with Mr. Richard Christian, AAOTF.

Sincerely,

JEROME G. BRICKER, PH. D.,
Member, AOWG Science Panel.

MINUTES OF THE SCIENCE PANEL—AGENT ORANGE WORKING GROUP

The Science Panel met on August 19, 1982. Tab A is a list of those in attendance.

Documents distributed

"Summary of Proceedings of a Conference on Herbicide Exposure and Reproductive Epidemiology in Viet Nam" by James H. Dwyer, Ph. D., Department of Psychology, State University of New York at Stony Brook (Tab B) was distributed to the members.

The problems encountered and methods used for cohort selection was discussed in detail. Mr. LeVois distributed a copy of a letter from George Fein, Ph.D., Psychologist, San Francisco Veterans Administration Medical Center, who was a consultant for the VA.

Dr. Keller presented a status report from the Subcommittee relating to the cohort selection. A draft of that status report is attached as Tab D.

After considerable discussion, it was decided that Department of Defense (DOD) should continue on hold. The entire question of guidance to the AAOTT continues to

be unresolved and under study by a subcommittee of this panel. Estimated date of completion of report by qualified epidemiologists is ————.

It should be noted that while these discussions are underway, time is being lost by DOD. However, they continue to do work on building the Services HERBS tape and responding to litigation requirements and other pertienent service research.

The major issues yet remaining to be resolved are the individual criteria to determine eligibility, the exact distance in time to be called "a herbicide hit," and most important, a weighting scheme for exposure. These issues are all addressed in Tab D.

VERNON N. HOUK, M.D.,
Chair, Science Panel, Agent Orange Working Group.

[Tab A]

Vernon N. Houk, HHS/CDC, FTS 236-4111, 404 452-4111.
Maurice LeVois, VACO, 382-2833.
Alvin L. Young, VACO, (102), 389-5534.
Maureen Corcoran, OGC/HHS, 245-6318.
Bart Kull, DUS/IGA, 245-6156.
Petter Beach, DUS/IGA, 245-2210.
Herbert E. Christensen, NIOSH, 433-1650.
Renate Kimbrough, HHS/CDC, 236-4113.
Michael Gough, OTA, 226-2070.
Hellen Gelband, OTA, 226-2070.
Jerome G. Bricker, OASD(HA), DOD, 697-8973.
Peter A. Flynn, OASD(HA), DOD, 697-8973.
Don Barnes, EPA, 382-2897.
Phil G. Brown, HQ, USAF/SGES, 202 767-5078.
Carl Keller, NIEHS/NIH, 496-3511.
R. A. Hodder, WRAIR, 576-2300.
John K. White, USAF, 325-6227.
Carlton T. Chapman, AAOTF, 325-6227.
Hugh M. Highland, AAOTF, 325-6227.
Lorraine D. Shively, AAOTF, 325-6227.
Dick Christian, AAOTF, 325-6227.

———

[Tab D]

STATUS REPORT FOR DEVELOPMENT OF EXPOSURE COHORTS TO BE USED IN VA EPIDEMIOLOGY STUDY

Of prime importance to the interpretation of any results from the proposed VA Epidemiology Study of Vietnam veterans' Health Status which might be associated with exposure to Agent Orange or the "Vietnam Experience" will be an understanding of the process used to identify potential study subjects. One of the major goals of the pilot phase of this study is to determine whether and how meaningful exposure Cohorts can be selected. In order to accomplish this goal, it is necessary that there be maintained a thorough documentation of the disposition of those units identified but not selected and the basis for inclusion or exclusion of all units considered.

It is understood that the procedures developed by the Army Agent Orange Task Force have been designed to make this selection both feasible and as efficient as possible, and entail a multistage process to minimize the very large number of records to be reviewed and a data to be entered. Furthermore, the procedures used to select study subjects for the pilot phase should mimic those to be used during the full study and the successful completion of the pilot phase will entail an evaluation of the cohort selection process as well as other aspects of the proposed study.

In order to insure that a meaningful comparison of health outcomes among "exposed" and "unexposed" cohorts can be accomplished, it will be necessary that these groups be similar in certain respects. Although it will not be possible to select subjects on the basis of individual characteristics, the units from which individual subjects will be chosen can be "matched" in some ways. Sufficient similarity should be maintained if exposed and unexposed units are selected from the same branch of service and a similar type of unit, and operating in the same Corps area, preferably in similar terrain. A more clearcut difference in exposure can best be assumed if unexposed units are selected from areas that are operating beyond the reasonable maximum drift for Ranchhand spraying and/or troop movements (~ 15 kilometers). Of course, it will be necessary to evaluate other potential exposures (e.g., perimeter spraying, dumps, etc.) for a final classification of both exposed and unexposed units.

The detailed documentation of the basis for decision at each step in the selection of units from which subjects will be chosen will facilitate an evaluation of the cohort selection process during the pilot phase and will be necessary for determining the feasibility of the proposed epidemiological study.

The following procedures are for selection of Vietnam service subjects with high and low likelihood of exposure to Agent Orange or other herbicides while in Vietnam and do not include the selection of a non-Vietnam cohort. The outlined steps have been included in the guidelines supplied by the AAOTF and should provide a list of subjects who can be recruited for a pilot study. Documentation requirements should provide information for an evaluation of the feasibility of identifying adequate cohorts to be used in a large full scale morbidity study among Vietnam veterans.

I. Prepare a map of Vietnam with Ranchhand spray tracks indicated for the period 1967–1968 (this has already been provided).

II. (*a*) Define areas with many closely spaced Ranchhand tracks and areas with few or no tracks during the 2 year period.

(*b*) Select one or more areas with much and one or more areas with little or no Ranchhand activity during the 2 year period.

This step should include areas which might be selected and the rationale for choosing selected areas.

III. (*a*) Obtain appropriate station lists for each area selected.

(*b*) Determine potentially eligible units which were operating throughout all or most of the 2 year period in the same area.

This step should include documentation of all units identified from station lists determined to be potentially eligible and how this determination was made.

IV. Determine availability and completeness of all eligible units' records of movement.

V. (*a*) Select units to be recorded as to daily movements.

This is a crucial step, and documentation of how and why a unit (or units) were selected should include the eligibility of all units which were potentially eligible and might have been selected. The potential for the selection of adequate numbers of units (or subjects) for a full scale study may depend on records completeness and availability.

(*b*) Record to machine readable format the daily location coordinates for selected units (this will probably include the entire 2 year period).

VI. Develop "enhanced" HERBS Tape by including information from herbicide applications not identified from Ranchhand missions. This will include perimeter sprayings, road clearings, helicopter missions, aborts and other identifiable applications. It should not be necessary to do more than those areas previously identified as high and low exposure areas in Step II. b. above. It will be more accurate to include the entire period of study (2 years) for this effort in those areas to be studied.

A necessary part of evaluating the reliability of exposure estimates will be the assessment of errors in and completeness of the available records for herbicide applications. Documentation of the type and number of errors and changes will assist in this effort as well as some method for assessing completeness.

VII. (*a*) Match daily location coordinates of selected units via computer with the "enhanced" HERBS Tapes to determine the number and type of "hits" sustained by each eligible unit between Jan. 1, 1967 and Dec. 30, 1968. Each "hit" will be defined and recorded according to all of the following 5 parameters for each unit:

(i) Type of Agent (Orange, White, Blue, Unknown).

(ii) Date.

(iii) Type of application (Ranchhand, Helicopter, Aborts, Ground incidents).

(iv) Time in days since application (d_0, d_1, d_2, d_3,).

(v) Distance from application site in km. (k_0, k_1, k_2, k_3,).

(*b*) List the "hits" for each unit matched.

An index or weighting scheme will have to be developed (not by AAOTF) by this time. While it may not be possible to satisfactorily quantify exposure, at least a weighing rule must be developed in order to identify high and low exposure units. It should be reiterated that "low likelihood of exposure" units should be selected from seldom or non-sprayed areas only.

VIII. Select high and low likelihood of exposures units.

This step should be documented, but will depend on selection via the weighting system developed for the previous step. The rationale for selection should be indicated and should include other criteria for the type of units chosen as well as herbicide exposure. Depending on the results of Step VII, it may be possible to identify "low likelihood of exposure" units with no "hits" of any kind. If this is the case, then a specific weighting system to discriminate between high and low exposed units will

not be crucial for selection. "High likelihood of Exposure" units can then be selected from among those units with at least several "hits" of various kinds.

IX. (*a*) Obtain daily morning reports for the period Jan. 1, 1967-Dec. 31, 1968 for each unit selected in the previous step.

(*b*) Track individuals through service with their respective units during this time period and record presence on "hit" days for their unit.

Some criteria for eligibility will have to be developed and documented, including the minimum number and quality of individuals, "hit" days, reliability of records for identification of individuals during this step, and their minimum length of assignment to the unit.

X. (*a*) obtain service records for selected individuals and verify service information obtained via morning reports.

(*b*) Record personal information from service record and include location of medical record for each selected individual.

At this step, it may be desirable to ignore the individual's identification as either exposed or unexposed during the period covered in these procedures. It will be necessary to identify multiple tours of duty in Vietnam and perhaps other criteria pertaining to military service which will influence his final selection into either of the Vietnam service cohorts. Documentation of these inclusions and exclusions will be necessary in order to assess bias in the final selection.

Although all of these procedures are included in the guidelines supplied by the AAOTF they are detailed here to identify the steps and type of documentation which will be useful in the evaluation of the exposure index and determination of the feasibility of selecting exposed and unexposed cohorts for the full scale study. Systematic departures from the procedures outlined here which may be necessary for the inclusion of subjects from each of the four branches of military service should be included in the documentation.

At this time, there are several important issues, pertaining to the selection of potential study subjects for the pilot study, which require further development before final specification can be agreed upon. Although results from the pilot study selection itself will contribute to the resolution of some issues, there are several problems which can be and must be resolved before proceding further. These are listed below and are developed more competely in seperate reports:

(1) The inclusion and details for selection of a third non-Vietnam service cohort.

(2) The individual criteria from personal service (201) records which may determine eligibility for the study (specifically-induction status and the possibility of multiple tours).

(3) The exact time and distance parameters to be recorded for herbicide "hits."

(4) A weighting scheme for the quality of exposure to specific herbicides for the various time, distance and type of application "hits."

NEW JERSEY AGENT ORANGE COMMISSION,
Trenton, N.J., September 14, 1982.

Hon. CHRIS SMITH,
Cannon House Office Building,
Washington, D.C.

DEAR CONGRESSMAN SMITH: Per my recent conversation with your Washington staff, I am providing the tabulated results of a survey recently conducted by our office. The survey, which involved 100 State Vietnam Veterans, was designed to gather "feedback" on the Agent Orange-related health care provisions of Public law 97-72.

I have included a brief summary and a number of recommendations applicable to Public Law 97-72 and the VA Screening process. I sincerely hope the information will be helpful, considering the very short time-frame we had to prepare the material.

The material has not been released to any other office or agency at this time, although I believe it will be utilized in the very near future.

Sincerely yours,

WAYNE P. WILSON, Executive Director.

RECOMMENDATIONS

(1) That the VA encourage a nation-wide system of scheduling exams versus walk-ins.

(2) That the VA use future mailing of materials to Veterans and utilize the opportunity to gather specific feedback.

(3) That sufficient staff and resources be provided to ensure that data from the field is entered into the Central Agent Orange Registry as expeditiously as possible.

(4) That considerably more attention and effort be given to informing Veterans about the provisions of Public Law 97-72.

(5) That another briefing of Environmental Physicians be held in proximity to Central Office rather than the so-called "hot-line" teletype process now used.

(6) That an alternate environmental physician (who is knowledgeable on the issue) be designated at VA facilities to cover vacation and/or peak periods.

(7) That every effort is made to enlist the assistance of the major Veterans organizations, State Veterans Bureaus and local officials in informing Veterans about 97-72.

(8) That every effort be made at all VA medical facilities to ensure reasonable scheduling of follow-up exams and/or appointments.

(9) That Environmental physicians be aware of and sensitive to possible cases of Post-Traumatic Stress Disorder and where appropriate, refer for follow-up evaluation.

(10) That support personnel such as X-ray technicians, etc. be sensitive to Vietnam Veterans and supportive of the particular facility's Agent Orange program.

(11) That Saturday group exams for Vietnam Veterans (with the assistance of the major Veterans organizations) be encouraged and conducted on a regular basis, nationwide.

On September 2, 1982 we mailed eight survey questions to 100 Vietnam Veterans randomly selected from several thousand questionnaires utilized with our Self-Help Guide. Three criteria were used in selecting the 100 Veterans.

(1) Our records indicated that the Veteran has requested an Agent Orange Screening Exam.

(2) The exam was scheduled since January 1982.

(3) The questionnaire completed by the Veteran showed three or more illnesses, either physical or emotional.

We received a total of sixty responses. The response rate is outstanding since we set a dead-line of September 12, 1982 for returning the surveys.

Question 1. Have you had an Agent Orange Screening examination at a VA facility?

Responses to the question—60; 75 percent indicated that they had been examined at a VA facility, 25 percent indicated that they had not kept the scheduled appointment.

Note: We consider the 75 percent show-rate for exams as good, considering figures we have seen for other States.

Question 2. If yes, the approximate date of that examination.

Note: As indicated previously, all Veterans were examined during the period January 1, 1982 and September 2, 1982. Some Veterans could not recall the specific month, only indicating 1982 or several months ago.

Question 3. In recent weeks have you received a letter and two pamphlets (brown and blue) concerning Agent Orange from the VA?

Responses to the question—60; 32 percent indicated they had received the two VA pamphlets, while 68 percent said they had not.

Note: this is probably attributed to the "lag-time" the VA has in getting data into their Central Registry.

Question 4. Are you familiar with VA health care provisions for Agent Orange as outlined in Public Law 97-72?

Responses to the question—60; only 17 percent of those responding indicated they were familiar with the health care provision for Agent Orange outlined in Public Law 97-72. Fully 45 percent said they were not familiar with the law; 15 percent were not sure and finally, 23 percent said they had never even heard of Public Law 97-72.

Note: The VA, State, and local agencies, as well as the Veterans Organizations need to make more Veterans aware of Public Law 97-72.

Question 5. If you answered yes to number 1, did the VA physician or any other VA employee discuss or make any reference to Public Law 97-72?

Responses to question—58; the statistics to the question are invalid, since we received 58 responses although only 45 Veterans had answered yes to number 1.

Note: However, it is interesting to note that fully 93 percent of those responding indicated that either the physician or other VA employees did not discuss or make reference to Public Law 97-72. Obviously, more attention needs to be devoted to this area during the Screening exam.

Question 6. If you answered yes to number 1, would your return to a VA Medical Facility for care and treatment of specific symptoms possibly related to exposure to herbicides?

Responses to the question—58; 55 percent of the respondents indicated they would return to a VA medical facility for care and treatment for specific symptoms. Only 12 percent answered no. The remaining 33 percent offered no opinion to the question.

Note: We were "surprised" at the fairly large percentage of Veterans who indicated they would seek treatment from the VA. Whether there is an economic factor to this response is unknown but it appears to suggest that if treatment was available at government expense, Veterans would utilize it.

Question 7. Please rate the screening examination provided by the VA. Responses to the question—59; fully 46 percent of the Veterans rated the examination provided by the VA as good to fair. Another 24 percent rated it as poor, while 30 percent offered no opinion.

Note: We believe the 46 percent fair to good rating indicates a positive view of the process for the most part. We do not know if the Veterans rating the exam poor represent one particular VA facility or a cross-section of the facilities we utilize. (See comments and recommendations section.)

Question 8. Please describe your current personal health. Responses to the question—60; excellent—3 percent, good—37 percent, fair—33 percent, poor—27 percent.

Note: While the question is for the most part subjective, it does require a personal response. It should not go un-noted that even though these Veterans listed three or more illnesses on a previous questionnaire, they perceive their health as generally good and is in my opinion, another valid argument against "the Vietnam cry-baby theory" so popular in certain quarters.

SUMMARY

As indicated earlier in this report, the response rate and cooperation of State Veterans to the Survey was outstanding, considering the extremely short time-frame. It is possible in our opinion to hone in on specific areas given ample time and we think it would be beneficial to do so. For example, in Question No. 7, we might find out which hospital, staffed by what physician, contributed to the 24 percent "poor rating".

We admit to the un-scientific nature of the survey and to the conclusions we may have drawn from the answers received. Never-the-less, we believe that the data here is important in terms of providing first-hand feedback from Vietnam Veterans. That in itself is a valuable tool in the day-to-day handling of this most complex issue.

THE VIETNAM VETERANS SELF-HELP GUIDE ON AGENT ORANGE

SOME QUESTIONS AND ANSWERS

State of New Jersey

Prepared By The New Jersey Agent Orange Commission

NEW JERSEY AGENT ORANGE COMMISSION
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Passaic, N.J.

Executive Director
WAYNE P. WILSON

Dear Veteran:

In recent months, the VA has provided the Commission with some 77,004 names and addresses on computer tapes. In some cases, we are not able to distinguish between those who actually served in RVN versus those who served elsewhere. Additionally, we are collecting important data and would appreciate your cooperation in completing the enclosed Survey Questionnaire. In *all* cases, we will ensure that information is kept strictly confidential.

Also, the Commission is seeking men who were *heavily* exposed to Agent Orange during service in Southeast Asia. We are doing a pilot study to see if dioxin can be detected in their bodies. Each person who volunteers for the study will be interviewed to establish their medical, military, and occupational history. Those who take part beyond the interview stage will receive a detailed physical examination and a set of tests. The examination and tests will be based on what is presently known about the effects of diozin. A blood sample will then be drawn for dioxin analysis, which will be done in a specialized laboratory. All results will be made available to the participants and to their physicians, if desired. There will be no charges involved.

The dioxin test is *not* a standard test. It is difficult, time consuming, and expensive. The analysis is done at the part per trillion level. If it is to work at all, we need individuals whose dioxin levels are relatively high. Hence the need for *heavily* exposed Veterans. We are particularly interested in handlers, mixers, air crews of spray aircraft – either fixed wing or helicopters – ground spray rig operators, and any others who have reason to believe that they were heavily exposed to Agent Orange. Present or past illness by itself does not necessarily mean heavy exposure. Based on the limited evidence now available, it is possible for heavily exposed Veterans to be healthy and lightly exposed Veterans to be ill.

If you were heavily exposed during service in Southeast Asia, and if you interested in taking part in the study, *write* to us. Please detail as much information about your exposure as you can recall. We will get back to you.

Sincerely yours,

Wayne P. Wilson

Wayne P. Wilson
Executive Director

BEST COPY AVAILABLE

A BRIEF BACKGROUND

During the period 1962-71, a number of chemical herbicides were used extensively in South Vietnam. These herbicides or defoliants, were designed primarily to deprive enemy forces of ground cover and to restrict food supplies. The most common of these defoliants was "Agent Orange", so named because of the orange stripes on the 55-gallon drums shipped to Southeast Asia. An estimated 18.85 million gallons of herbicide sprays were used with two-thirds of that total being Agent Orange.

Briefly stated, Agent Orange is a 50/50 mixture of 2,4,5-tricholorphenoxyacetic acid, (2,4,5,–T which contains TCDD or Dioxin) and 2,4 - dichlorophenoxyacetic acid, (2,4,–D). In terms of toxicity, ***Dioxin*** is one of the most toxic substances known to man. Dioxin or TCDD, is of special concern because it has caused cancer, miscarriages, and birth defects in laboratory animals exposed to it. The exact effects of Dioxin on humans is scientifically inconclusive at this time, except for a specific skin condition known as Chloracne. In addition to the herbicide Agent Orange, the Veterans of Foreign Wars has called attention to the use of another herbicide "Agent Blue".

A number of scientific studies on dioxin related-groups have been completed and others are underway. Some of the studies are aimed specifically at trying to find answers to questions about Agent Orange as used in Vietnam. In recent months, the VA has called for in-house proposals and some 36 ***proposals*** were received from 27 VA facilities. Thirty-one (31) deal with Agent Orange and five (5) specifically to Agent Blue. The VA office of Research and Development is attempting to find the necessary funds for these proposals. The Pilot Study on birth defects being done by CDC in Atlanta is completed and they are moving into the main study. The Air Force Ranch Hand exams will be completed in September 1982. The congressionally mandated (PL 96-151) Epidemiological Study is still under consideration for approval of the design after a number of delays. The Commission is closely following this specific effort. Scientific studies take time and we all realize there cannot be any shortcuts on so important an issue.

In addition, several other important efforts have been undertaken at the federal level. In mid-1979, a *VA Advisory Committee on the Health-Related Effects of Herbicides* was formed. The New Jersey Agent Orange Commission recognizes the important role of the Advisory Committee. Several members have indicated that they lack input from the Veterans community on this vital issue. We would encourage you to forward any comments concerning the VA's role or any other aspect of this issue directly. You may write to the following:

Representative VA Advisory Committee on Herbicides
1608 K Street, N.W.
Washington, D.C. 20006

Representative
VA Advisory Committee on Herbicides
807 Maine Avenue, S.W.
Washington, D.C. 20024

At the State level, New Jersey was the first State in the nation to recognize its special obligation to the Veterans of Vietnam. In June 1979, Assemblyman Richard Van Wagner, D - Monmouth-Middlesex, introduced legislation to establish a State Commission. In February 1980, the Governor signed Bill 3401 providing for a New Jersey Agent Orange Commission. Additional Legislation that would provide the Commission with permanent status has received the unanimous support of the Assembly and Senate and is awaiting the Governor's signature at this time.

The original legislation, (Public Law 1979, Chapter 443) requires that at least four members of the Commission be Vietnam Veterans and that is the case. Basically, the Commission's mandate falls into two main areas; first, to provide and coordinate various social services to the Vietnam Veterans and secondly, to attempt to establish possible links between various illnesses reported by Veterans and the use of herbicides in RVN. A difficult task to be sure, but one the Commission feels committed and dedicated to complete. *Special note:* All Commission members and Dr. Gochfeld are unsalaried.

COMMISSION MEMBERS

*Guy A. Wiener	Chairperson
*James Credle	Vice Chairman
*Robert P. Marasco	Secretary
Ralph W. Fogleman, DVM	Member
Peter Kahn, Ph.D.	Member
Laura E. Morrow, M.D.	Member
*Allen E. Falk, Esquire	Member
*Michael Gochfeld, M.D., Ph.D.	Special Consultant
*Wayne P. Wilson	Executive Director
Eileen E. Birk	Secretary to Mr. Wilson

(* denotes Vietnam Veteran)

WHAT SHOULD MY FIRST STEP BE?

The Commission wants you to be officially on record with the Veterans Administration. The only way to do that, is to obtain an Agent Orange Screening Examination. The exams are free and normally take two hours including the various tests that are performed. Being on record, (whether you are experiencing any health problems or not), protects you and your family in the future; the data you provide on the VA Agent Orange Questionnaire, plus your exam results play an important part in determining health patterns resulting from your service in RVN; and finally, your name will be added to the VA Agent Orange Registry for possible follow-up.

99-745 O - 82 - 9

HOW AND WHERE DO I GET THE SCREENING?
We are probably the only State that operates primarily on a scheduled exam basis. This has reduced long waiting periods, incomplete exams, and hassles for Vietnam Veterans, and we are appreciative of the VA's cooperation in this particular area. Lyons VA which is somewhat isolated utilizes a walk-in system but there is usually no waiting if you arrive around 9 a.m. any day of the week. You can call yourself and schedule the exam. It is relatively simple.

We will be glad to schedule the exam for you simply by calling our office or completing the survey data sheet. We will provide you with an appointment notice.

Philadelphia Outpatient Clinic
(9 exams per day)
(215) 597–4638

East Orange VA Hospital
(5 exams per day, Tues.–Fri.)
(201) 676–1114

Allentown, Pa. Outpatient Clinic
(5 exams per day)
(215) 776-4304

Lyons, VA Hospital
(early a.m. walk-ins only)
(201) 647–0180

Wilmington, Delaware VA Hospital
(as requested)
(302) 994–2511, ext. 216

Considering our very large Vietnam Veteran population in New Jersey (approximately 89,000) there have been few scheduling delays since we stagger our mailings, north, south, central, so as not to overload any one VA facility. So if you experience any delays, or any other problem in scheduling an exam immediately, contact our Commission.

You may want to bring proof of your Veterans status (DD214, VA hospital card, etc.) when you report for the exam.

IS THERE ANYTHING ELSE I SHOULD KNOW ABOUT THE EXAM?
You may want to make some brief notes about your medical history since returning from RVN. You will have to complete VA Form 10–10 and a medical history as part of the Agent Orange Questionnaire. Tell the examining physician ***everything.*** Do ***not*** minimize any problem. Report miscarriages, inability to bear children or father children, etc.

Many Veterans have objected to the wording used in the Agent Orange Questionnaire (VA Form–10–20681 (NR). Specifically the Questionnaire starts off with "How many exposures does the Veteran allege?" Obviously,

that question is almost impossible to answer for the vast majority of Veterans. Some Veterans may in fact know of specific instances where missions were observed and this should be noted on the Questionnaire. But for most of us the answer would be: "in accordance with documented Dept. of Defense records." The reason for that answer is that DOD has recently developed a methodology for matching (in some cases) unit locations with documented spraying missions. Work is continuing in this area. So do the best you can with the outdated Questionnaire.

You may want to request copies of medical records from your personal physician to be included in your exam packet. Do not be afraid to ask questions! After the exam is completed, the VA is required to notify you in writing of the detailed exam results. Sometimes referrals or additional exams are necessary. This will result in your examination being incomplete until they are done. You should ***not*** have to wait an unreasonable length of time between the initial exam and follow-ups. *SPECIAL NOTE:* You should be able to obtain copies of your Screening exam for your personal physician by filling out VA Form 60–3288, *Request for and Consent to Release of Information from Claimant's Records.* You can obtain this form by calling the VA and it should be mailed back to the Regional Office in Newark. One final note; since you took a ***scheduled*** exam, you may be eligible for travel reimbursement. ***See the paymaster.***

WILL THE VA TREAT ANY PROBLEMS I TELL THEM ABOUT?
The answer is "No". However, Public Law 97–72 ***now*** authorizes the Veterans Administration to "provide certain health care services to any veteran of the Vietnam Era (August 5, 1964 – May 7, 1975) who, while serving in Vietnam, may have been exposed to dioxin or to a toxic substance in a herbicide or defoliant used for military purposes. Health care services may not be provided, under this law, for the care of conditions which are found to have resulted from a cause other than exposure to these substances."

Interim guidelines for carrying out the provisions of 97-72 have been sent to all VA facilities. The VA has put out a small pamphlet on this and you might ask to see a copy while you are at the exam site. Final guidelines should be forthcoming in the near future. We are providing a copy of the interim guidelines to various Veterans offices around the state as well as to individual Veterans we schedule for exams. The pamphlet is titled ***"Agent Orange"... Information for Veterans who served in Vietnam.***

In addition, the next section, Priority Care and Treatment, may offer a way of obtaining treatment.

HOW CAN I OBTAIN PRIORITY CARE AND TREATMENT?

We know that the VA does not recognize possible Agent Orange related illnesses in terms of awarding service-connection or priority care and treatment. Only the Congress can affect the laws that would give the VA the authority to do this. For now we would suggest the following process as a possible way of obtaining service connection and the priority care and treatment some Veterans so urgently need. ***SPECIAL NOTE:*** The Agent Orange Screening exam and the filing of a service-connected claim are ***two very different actions!***

Immediately ***file*** a Service-connected claim. It is not that difficult to do, but we suggest a special way to do it. First, you need the VA Forms. You can call the VA at (201) 645–3458, or see the "Where To Get Help" Section. A local American Legion, DAV, VFW, AMVETS Service Officer (See white pages of your telephone book) can get them for you.

(1) **VA Form 21–526** – "Veterans Application For Compensation and Pension". Item No. 24 is very important. If you do not list your problem(s) you will not be examined for it.

****

VERY IMPORTANT!!!

The vast majority of claims for Agent Orange are denied at this time. DO NOT, I repeat, DO NOT Mention Agent Orange anywhere on any of these forms. Let the VA identify your problem(s).

ONE EXCEPTION!!!

If you want your claim to be based entirely on Agent Orange, say so. That is the only exception.

****

(2) **VA Form 4138** – "Statement in Support of Claim". You can provide additional info, request travel pay, request where you want to be examined, etc. A good general purpose form.

(3) **VA Form 23–22** – "Appointment of Veterans Service Organization as Claimant's Representative". You can designate any Veterans organization or the State of New Jersey. You don't have to belong to a Veterans organization, they will help anyway.

(4) **VA Form 21–4142** – "Authorization For Release of Information". To give your personal physician or hospital records to the VA to help support your claim.

(5) **VA Form 60–3288** – "Request For and Consent to Release of Information From Claimant's Records". Allows your personal physician to see VA medical records.

(6) **S.F. 180** – "Request Pertaining To Military Records". Send for your military medical records so you can be sure the VA has all of them. Attach a plain sheet of paper to the SF-180 noting ***when*** and ***where*** you were hospitalized or treated. This may help locate hard-to-find and important records. If you find the military has lent them to the VA, ask the VA for copies.

Read the instructions that go with the forms. Because of space, we have been brief in this section. If you have questions, ask, ask, ask! After you complete the forms, send them to the VA Regional Office, 20 Washington Place, Newark, New Jersey 07102. ALWAYS KEEP COPIES FOR YOUR PERSONAL FILE. ALWAYS INCLUDE AT LEAST YOUR SSN ON EVERY DOCUMENT!

BE PATIENT – IT TAKES TIME!!!
PERSEVERE – THE MORE YOU STAY ON TOP OF IT THE BETTER.

Do not pay attention to anyone who says, "You don't have a chance". Let the Adjudicators do their job. Your claim is your claim.

SPECIAL NOTE: There is no fee to have any member of any Service Organization help you file your claim. This service is free.

SPECIAL MESSAGE TO SERVICE OFFICERS:
As we all know by now, Agent Orange is a complex issue, one that is ever changing, sometimes even on a daily basis. We must track new legislation and keep abreast of changes in VA regulations that pertain to this issue. It is important that you have the proper VA forms on hand and fully explain to Veterans the difference between the screening exam ***and*** a compensation or pension claim.

As a Service Officer, you are in a unique position to obtain feedback from Veterans in your community. We will be glad to assist you in getting updated/ factual information for distribution to Veterans in your community.

There are almost 1400 Service Officers in the State of New Jersey and you can play a major role in our attempts to have New Jersey Veterans as the most informed group in the nation.

We will assist you in any way we can. You need only drop us a line. Thank you!

WHAT KINDS OF PROBLEMS ARE ASSOCIATED WITH EXPOSURE TO HERBICIDES?

Much of what we know in terms of human exposure to dioxin comes from a number of industrial accidents that have occurred around the world. Headaches, nauseau, alteration in the liver function, nerve damage, blood disorders, are among *some* of the more common illnesses reported, although these are usually associated with the periods immediately following exposure. A skin condition called ***chloracne*** has also been noted and as of this writing, is the only problem associated with exposure that is recognized by the Veterans Administration. We would encourage Veterans to follow closely federal legislation that would clarify what is ***or*** what is not attributed to exposure to herbicides in Vietnam, since in all fairness, the VA does not make laws. Congressman Daschel of South Dakota and Senator Heinz of Pennsylvania have been leading advocates and sponsors of legislation that would assist Veterans and their families in this area. Your Congressional representative may be able to provide copies of legislation that will update you on this. Congressman Hollenbeck and Congressman Roe from New Jersey have been supportive of our efforts to have information on the role of State Commissions included in future Congressional Issue Briefs. *(See section on reference materials)*

Additionally, we have spent considerable effort in reviewing various reports, etc. detailing laboratory tests on animals. In these tests, cancers, birth defects, and miscarriages have all been documented. Veterans in New Jersey (as well as around the Nation) are reporting these and other problems as well. To date, the federal government's position has been that the evidence linking these problems to the exposure of herbicides in SEA is inconclusive. We are suspicious of the connection, but suspicion is not ***proof.*** We are very much involved in scientific research of our own but this work is highly complex, very time consuming, and costly. Additional efforts are underway around the country and we are monitoring this work. The question of whether enough is being done . . . quickly enough, is the subject of much debate in and by itself. ***Many*** Veterans have indicated to us that, "they just want to know where they stand on this." We would agree wholeheartedly with that sentiment.

Mail to: N.J. Agent Orange Commission
Broad St. Bank Bldg., Room 515
143 East State St., Trenton, N.J. 08608

QUESTIONNAIRE

We have redesigned this survey data sheet and added additional questions in an effort to have as much information as possible in our efforts to resolve this complex issue. We appreciate any assistance you may want to give in this regard. We fully realize that some of the following questions may be very sensitive to you and your family and we will use every means at our disposal to ensure that the information is kept strictly confidential. Thank you.

Name: _____

S.S. No. _____ Date of Birth: _____

Address: _____

_____

Check one: Service in RVN or Naval Ships at sea _____
Service elsewhere _____
What Service/Dates in RVN _____

1. Please list any illnesses or similar problems since you served in RVN.

_____

_____

_____

_____

2. Has your spouse had any miscarriages or spontaneous abortions since your service in RVN?
(Female Veterans please note in No. 1)

_____

3. Have any of your children been born with birth defects? ☐ Yes ☐ No

4. Describe your present health: *(Check one)*
☐ Excellent ☐ Good ☐ Fair ☐ Poor

5. Do you perceive the Veterans Adminstration as concerned about your possible Agent Orange problems?
☐ Yes ☐ No

6. If you checked "yes" to question No. 3, please indicate if the child/children were born ***before*** or ***after*** Vietnam Service.
(Check one) ☐ Before ☐ After

7. Please indicate below specifically what your job(s) was in Vietnam. *Example: I was a radio repairman in the field with an infantry unit or I was a cook on a forward fire base.*

_____

_____

8. Did any unit (squad, platoon, etc.) you served with, *or* have knowledge of, ever fall ill as a group?
☐ Yes ☐ No *(If yes, please provide details on a separate piece of paper)*

9. Please briefly list your occupational history since your service in Vietnam. *Example: telephone installer, warehouse supervisor, etc.*

_____ _____

_____ _____

10. Whether you served in Vietnam or not, would you be interested in being contacted at a future date, concerning possible voluntary participation in a State or Federal research effort? *(Check one)* ☐ Yes ☐ No

11. Are you an ***Identical Twin?*** ☐ Yes ☐ No

IMPORTANT: If you would be interested in us obtaining a free *scheduled* exam at a VA facility for you, please check below. The exams are normally done 9–5 on weekdays. If you check *"yes"*, we will need a telephone number in case there is a cancellation or other problem in scheduling.

☐ Yes ☐ No Telephone No. _____ – _____
(area code)

Is there a particular day of the week you would prefer?

☐ Yes ☐ No Day preferred _____

Note: Normally the exams are scheduled within a 15–45 day time frame at the VA facility nearest your home. If you would prefer to go to a specific VA facility, please indicate. At the present time, East Orange is doing Saturday morning exams on the third Saturday of the month. These slots are limited, so check with them or us for availability or any changes in this procedure. Please, if you cannot make the exam, call, so we can use the slot.

ADDITIONAL DATA (optional)

1. Have you ever filed a service-connected claim? ☐ Yes ☐ No

2. Are you in receipt of VA disability compensation? ☐ Yes ☐ No

3. Prior to receiving the Guide, what was your primary source of information on Agent Orange?

_____

_____

4. We would like to know what *you* thought of the Guide.
☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ No opinion

5. Comments, suggestions, etc.

_____

_____

_____

_____

_____

_____

_____

ARE THERE ANY LEGAL OPTIONS OPEN TO ME?

Yes, there are a number of options available to you and your family. You are probably aware of the "Class Action Suit" filed some time ago in U.S. Court, Eastern District of New York. Since space prohibits us from covering this area in any detail, Veterans should be aware that the suit is still pending. There have been a number of court decisions in recent months but primarily they deal with various legal technicalities. You may wish to contact an attorney and see if it is possible for you to still become part of the Class Action. Commission member, Allen Falk, who is an attorney, is closely monitoring the case and we have consulted with a number of attorneys around the country in an ongoing effort to stay updated.

Secondly, Veterans and/or their families may file an official claim with the Government. Standard Form 95, "Claim For Damage, Injury, or Death" may be utilized.

Lastly, the National Veterans Law Center in Washington, D.C. is a good source of information concerning various legal options as well as information pertaining to VA/Government regulations/policies on the Agent Orange issue. Their address is:

National Veterans Law Center
4900 Massachusetts Avenue, N.W.
Washington, D.C. 20016
ATTN: Mr. Lewis M. Milford, Esq.

AGENT ORANGE REFERENCE MATERIALS

It is impossible to list the thousands of documents, reports, books, etc written on herbicides. Instead, we are providing a small sample list reference materials for you to review if interested. You may wish to co the congressional office located in your district for assistance in obta the United States Government documents.

BOOKS

(1) **"DEFOLIATION"** – By Thomas Whiteside, Ballentine Books, I... N.Y., N.Y.

(2) **"THE PENDULUM AND THE TOXIC CLOUD"** – Thomas Whiteside, Yale University Press.

GOVERNMENT REPORTS

(1) **Agent Orange: Veterans Complaints Concerning Exposure To Herbicides in South Vietnam.** Available from Library of Congress, Issue Brief No. IB80040 9/6/79, updated 3/1/82. Call in Washington, (202) 287-5700.

(2) U.S. General Accounting Office – **Health Effects of Exposure to Herbicide Orange in S. Vietnam Should Be Resolved** – April 6, 1979. CED–79–22.

U.S. Ground Troops in S. Vietnam Were In Areas Sprayed With Herbicide Orange. November 16, 1979. FPCD–80–23.

(Special Note: the U.S. General Accounting Office is expecting to issue a new report that primarily will deal with the Agent Orange process in VA Hospitals.)

(3) Congressional Record (daily ed.), April 1, 1980. E 1731.

(4) Congressional Record (daily ed.), March 25, 1980. E 1472.

(5) Congressional Record (daily ed.), April 15, 1980. E 2515.

(6) S. 689 (Heinz)

(7) H.R. 2493 (Daschle)

ADDITIONAL MATERIALS

(1) **Herbicides In Peace and War.** Bioscience, Volume 29, February 1979: pps 84, 94

(2) **Death of a Nation.** New West, Volume 3 August 28, 1978: pps 49-50, 52-55

(3) **Soldier of Orange**: The Administrative, Diplomatic, Legislative, and Litigatory Impact of Herbicide Agent Orange in South Vietnam. By Bruce F. Myers. Boston College Environmental Affairs Law Review, Volume 8, Number 2

MELIOIDOSIS

In recent months there has been a substantial amount of interest in a rare disease called Melioidosis. The bacterium that causes it, ***pseudomonas pseudomallei,*** is endemic to the soil, water, and fruit of Southeast Asia and can be ingested, breathed, or absorbed through cuts.

A U.S. Public Health Service reprint (from the New England Journal of Medicine) notes: "Approximately 2.5 million men served in Vietnam from 1965–1973. Infection with pseudomonas pseudomallei may have occurred in as many as 25,000 to 250,000 on the basis of previous serologic surveys . . . ". The article notes that cases may be seen more frequently as the Vietnam Veteran population ages.

The New Jersey Agent Orange Commission has already devoted considerable effort to learning more about Melioidosis and we are continuing to gather information to make available to the Veterans community. We have put together a collection of articles from various medical journals, Army documents, and communications with the Centers for Disease Control (CDC) in Atlanta. Physicians desiring copies of these materials may contact the Commission.

Additionally, CDC has indicated that they will run tests on samples forwarded from our State Department of Health or from individual physicians. We are in the process of preparing materials that will be made available to the State Medical Society for possible use. Veterans are encouraged to make their personal physicians aware of their service in Southeast Asia.

Lastly, the National Office of the Veterans of Foreign Wars has made a number of recommendations in this matter to the Veterans Administration.

It should be noted that Melioidosis is considred rare and as of this writing, only one possible case in New Jersey has been brought to our attention.

Additional updates on Melioidosis will be made available as more information becomes available.

COMMISSION PHONE NUMBERS

We have added a third phone in our office that may be answered by a volunteer. Since our staff is comprised of two people, we may be out of the office for illness or outreach work. To handle this situation and to receive evening and week-end calls, we have added an answering machine. We do receive a large number of calls but in all cases we will return your call as promptly as possible. Thank You.

(609) 984–7396 **Answering machine**
(609) 984–7397
(609) 292–1443

WHERE TO GET HELP

Bureau of Veterans Services
CN 700, Trenton, N.J. 08625
609–292–5880 (Headquarters)

Bureau of Veterans Services
601 Bangs Avenue, Room 709
Asbury Park, N.J. 07712
201–775–7009
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
26 S. Pennsylvania Avenue
Atlantic City, N.J. 08401
609–441–3060
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
City Hall Annex
East Commerce Street
Bridgeton, N.J. 08302
609–455–2743

Bureau of Veterans Services
125 Broad Street, Room 815
Elizabeth, N.J. 07208
201–648–4493
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
26 South State Street
Hackensack, N.J. 07601
201–342–3363
Monday – Friday, 9:00 – 5:00

Bureau of Veterans Services
Jordan & Montgomery Streets
Jersey City, N.J. 07306
201–433–6886
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
20 Washington Place
Newark, N.J. 07102
201–648–2849
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
46 Bayard Street
New Brunswick, N.J. 08901
201–846–4433
Wednesday – Friday, 9:00 – 5:00

Bureau of Veterans Services
39 Trinity Street
Newton, N.J. 07860
201–383–4949
Thursday, 9:00 – 4:00

Bureau of Veterans Services
Borough Hall
263 Somerset Street
N. Plainfield, N.J. 07080
201–756–5590
Tuesday, 8:30 – 4:30

Bureau of Veterans Services
P. O. Box 8079
Manheim & Wissahickon Streets
Philadelphia, Pa. 19101
215–951–5621 & 215–848–3393
Mon., Tues., Thurs., Fri. 8:00 – 4:00

Bureau of Veterans Services
55 South Main Street
Phillipsburg, N.J. 08865
201–859–0907
Wednesday, 9:00 – 4:30

Bureau of Veterans Services
100 Hamilton Plaza, 6th Floor
Paterson, N.J. 07505
201–345–9760
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
352 East Main Street
Somerville, N.J. 08876
201–725–2600
Friday, 8:30 – 4:30

Bureau of Veterans Services
145 East State Street
CN 700
Trenton, N.J. 08625
609–292–5881 & 609–292–5882
Monday – Friday, 8:30 – 4:30

Bureau of Veterans Services
Court House, 1 North Broad Street
Woodbury, N.J. 08096
609–845–1600, ext. 376
609–845–3900
Monday – Friday, 8:30 – 4:00

99-745 O—82——10

WHERE TO GET HELP (cont'd)

Vietnam Veterans Outreach Center
American Legion Post 430
P.O. Box 725
Cologne, New Jersey 08213
Hours: 7-11 p.m. every Thurs.
Thomas Kassay – 609–652–0322

Gloucester County Vets (GLO-VETS)
North 251 Delsea Drive
Deptford, New Jersey 08096
609–848–0749 Direct
609–845–8950 Receptionist

AMVETS National Representative
War Memorial Building, 2nd Floor
Trenton, New Jersey 08625
Tues. & Thurs. 11 a.m. – 3 p.m.
609–695–2592

Bergen County Veterans Bureau
355 Main Street
Hackensack, N.J. 07601
Mr. Paul Beland
201–646–3487

Mercer County Veterans Services
Mr. Rich McCoy
609-989-6120

Morris County Veterans Service Office
Administration Court House
Morristown, New Jersey 07960
Mr. Irving Skolnick, Service Officer
8:30 – 4:30 201–285–2759

Contact your local Veterans Affairs Office of a College or University near you.

SPECIAL NOTE: The number of resources and outreach efforts around the State are expanding all the time. These combined efforts whether they are funded or volunteer in nature are important in terms of getting the word out and providing hands-on personal assistance. We will do all we can to support their valuable contribution to our State's Veterans.

VETERANS ADMINISTRATION

VA Regional Office, Newark
20 Washington Place
Newark, N.J. 07102
Toll-free 800–242–5869
In Trenton, call 609–989–8116
Please check white pages of your telephone directory under US Government for additional numbers.

VA Medical Center
University & Woodland Avenues
Philadelphia, Pa. 19104
215–382–2400

VA Outpatient Clinic
Broad & Cherry Streets
Philadelphia, Pa.
Appointment desk for Phila., Pa.
215–597–4638

Vet Center
601 Broad Street
Newark, N.J. 07102
201–622–6940

Vet Center
Van Buren Medical Center
1411 N. Van Buren Street
Wilmington, Delaware 19806
302–571–8277

VA Hospital
East Orange, N.J. 07019
201–676–1114

VA Hospital
Lyons, N.J. 07939
201–647–0180

VA Hospital
Wilmington, Delaware 19805
302–994–2511, ext. 216
Sara Haigh, R.M., Nurse-Agent Orange Coordinator – Wilmington, VA.
302–994–2511, ext. 213 or 214

Vet Center
626 Newark Avenue
Jersey City, N.J. 07306
201–656–6988

Vet Center
1107 Arch Street
Philadelphia, Pa. 19107
215–627–0238

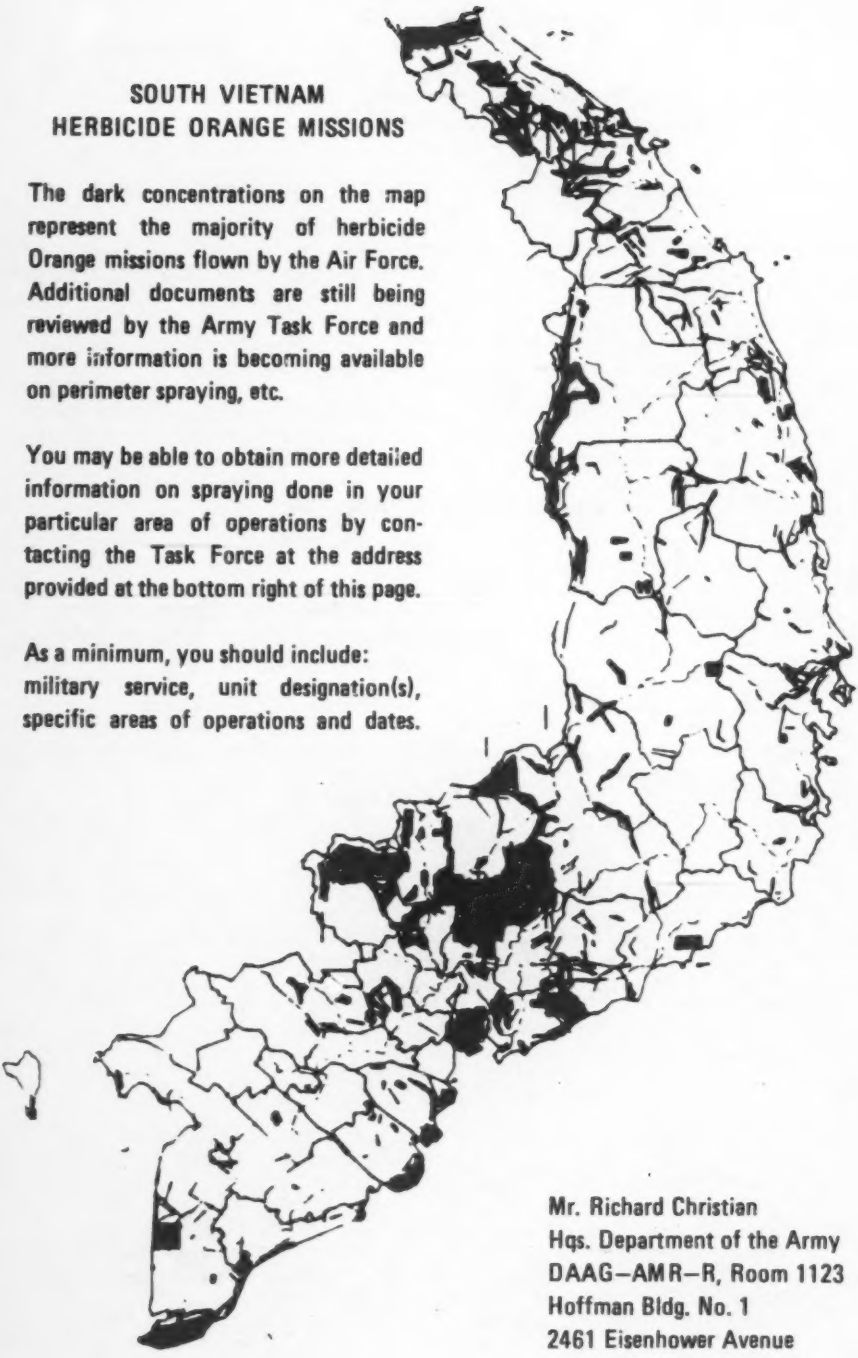
Vet Center
318 East State Street
Trenton, N.J. 08608
609–989–2260
FTS – 483–2260

SOUTH VIETNAM
HERBICIDE ORANGE MISSIONS

The dark concentrations on the map represent the majority of herbicide Orange missions flown by the Air Force. Additional documents are still being reviewed by the Army Task Force and more information is becoming available on perimeter spraying, etc.

You may be able to obtain more detailed information on spraying done in your particular area of operations by contacting the Task Force at the address provided at the bottom right of this page.

As a minimum, you should include: military service, unit designation(s), specific areas of operations and dates.



Mr. Richard Christian
Hqs. Department of the Army
DAAG–AMR–R, Room 1123
Hoffman Bldg. No. 1
2461 Eisenhower Avenue
Alexandria, Va. 22331

DEPARTMENT OF HEALTH AND HUMAN SERVICES,
Washington, D.C.

Memorandum to: Chair, Cabinet Council on Human Resources.
From: Chair, Agent Orange Working Group, Cabinet Council on Human Resources.
Subject: Chronology of Activities, Agent Orange Working Group.

A number of significant activities have occurred since the last "Chronology of Activities re: Agent Orange," released on October 21, 1981. A summary of these activities follows:

1. TESTIMONY BEFORE THE SENATE VETERANS AFFAIRS COMMITTEE, NOVEMBER 1981 (ATTACHMENT 1)

In November, the Chair of the Agent Orange Working Group (AOWG) presented testimony before the Senate Veterans Affairs Committee. In addition, other member agencies of the AOWG, including the Department of Defense (DOD) and Veterans Administration (VA), presented testimony. A research scientist from the Centers for Disease Control reported on the progress of the Birth Defects Study. The general purpose of the hearing was to provide the Committee with updated information on Agent Orange. This included testimony on the U.S. Air Force Health (Ranch Hand) Study, the VA Epidemiology Study, and other AOWG monitored research efforts. A representative from the congressional Office of Technology Assessment and various veterans' service groups also presented testimony before the Committee.

2. NOVEMBER 1981 AOWG MEETING

(A) Department of Defense reports to AOWG on records search efforts.—The DOD representatives to AOWG provided updated information on their search to identify military records which will be used ultimately to define possible exposure of troops to Agent Orange and other herbicides. The Science Panel has closely monitored this records search. It is the first step towards identifying population groups who were probably heavily exposed and groups who were possibly not exposed in order to select research cohorts for future studies.

(B) VA Mortality Studies.—In November, the Science Panel began a review of the VA preliminary protocol for the Vietnam Veteran Mortality Studies which will attempt to establish and catalog the cause of death among Vietnam veterans. (See Summary of Study, Attachment 2)

(C) Review of VA Protocol for Epidemiological Study.—The Science Panel completed its review of the first draft protocol submitted by UCLA for the VA Epidemiological Study. The Science Panel determined that it was not possible to provide a meaningful review of the document because of the lack of detail. It was returned with a request that a more specific protocol be developed. (See March meeting summary for followup on protocol review.)

(D) Review of Literature on Herbicides Completed.—The Veterans Administration contracted early in 1981 for a review of all published scientific literature on phenoxy herbicides. The two volume publication entitled "Review of Literature on Herbicides, Including Phenoxy Herbicides and Dioxins," was published in October 1981. Interested parties may order a copy of this extensive review from the U.S. Government Printing Office, Washington, D.C. 20401.

3. DECEMBER 1981 AOWG MEETING

(A) State Legislation.—At the December meeting, the AOWG reviewed and discussed legislation introduced by an ever-widening number of state legislatures. Efforts will be made to share information regarding federal research efforts with the states. More than one state has passed a bill which includes a program allowing veterans to obtain fattissue biopsies to determine levels of dioxin. The Science Panel expressed serious reservations about such a program. A subcommittee examining the subject will prepare a report to allow the Science Panel to assess the state of the art and the interpretation of the analysis of dioxins in fat.

(B) U.S. Air Force Health (Ranch Hand) Study Progress Reported.—In December the Air Force awarded a $5.1 million contract to the Kelsey-Seybold Clinic in Houston, Texas, to begin physical examinations of Ranch Hand personnel (ground and air crew involved in spraying of Agent Orange) and of a matched control group. All questionnaires are to be completed by June 1982; all physicals are expected to be completed in November 1982. Preliminary data are expected by mid-1983. (See Summary of Study, Attachment 3)

(C) Department of Defense presents cohort selection paper.—On December 4, 1981 the AOWG representatives from the Department of Defense submitted a concept

paper to the AOWG Science Panel presenting a model for selecting research cohorts of Agent Orange exposed and non-exposed military personnel serving in Vietnam. Identification of such research cohorts was not thought possible one year ago. The Army Agent Orange Task Force and the DOD/Health Affairs representatives received particular praise for their efforts in the records search and development of this model for identifying research cohorts.

4. JANUARY 1982 AOWG MEETING

In January the AOWG reviewed the second draft proposed protocol for a congressionally-mandated VA epidemiology study of Vietnam veterans. The UCLA study plan was revised after AOWG commented on the first draft protocol submitted in November 1981.

5. FEBRUARY–MARCH 1982 AOWG MEETING

(A) Epidemiology Protocol Endorsed by Science Panel.—There was no meeting of the AOWG in February, but in March the AOWG completed its review of the VA epidemiology protocol and endorsed the design with certain recommendations for change. (See Summary of Study, Attachment 4.) The consensus report was submitted to the VA and to the Senate Veterans Affairs Committee on March 24, 1982. (See Science Panel report, Attachment 5.)

(B) The congressional Office of Technology Assessment also completed its scientific review of the same protocol with findings similar to those of the AOWG. This report was delivered to the VA and released to Congress in March.

(C) VA Mortality Studies.—The Science Panel approved the general concept of the VA Mortality Studies and, subject to records validation and Army Agent Orange Task Force checks, will assist in the development of the final protocol.

6. APRIL MEETING OF AOWG

During March the AOWG recommended to the Chair of the Cabinet Council that DOD provide additional staff and computer support for the records search team seeking to identify the Vietnam veteran cohort lists needed for Agent Orange research, particularly the VA Epidemiology Study. In April Secretary Weinberger responded to the AOWG recommendation with a statement of DOD support and assurances that the necessary records access, research and retrieval will be made available with DOD resources to expedite Agent Orange research efforts.

At the April meeting the Veterans Administration presented a briefing on various Va research and education activities in progress and planned. The Centers for Disease Control has completed the pilot study phase of the study on birth defects. The Science Panel will convene in May to review preliminary data from that study.

7. SCIENCE PANEL REPORTS

We have attached the AOWG Science Panel Reports prepared by the Science Panel Chair, Dr. Vernon Houk, at Attachment 6.

8. FEDERAL AGENT ORANGE RESEARCH PROGRAMS

The AOWG continues its oversight of all Agent Orange research in the federal sector. Detailed scientific activity reports and budget estimates for ongoing Agent Orange research are available on request from the Chair of the Agent Orange Working Group.

Summaries of other Agent Orange research within the Department of Health and Human Services, the Environmental Protection Agency and the Veterans Administration, including the CDC Birth Defects Study, are appended at Attachment 7.

Statement by James S. Stockdale, Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services and Chair, Agent Orange Working Group of the Cabinet Council on Human Resources

Mr. Chairman and members of the committee, I am James Stockdale, Deputy Under Secretary for Intergovernmental Affairs, Department of Health and Human Services, and Chair of the Agent Orange Working Group of the Cabinet Council on Human Resources. I am pleased to have this opportunity to appear before the Committee to report on the Federal government's ongoing efforts to study and hopefully to reach scientifically valid conclusions about the possible long-term human health effects of exposure to phenoxy herbicides and contaminants, with a particular focus

on the results of exposure of American service personnel to the herbicide known as Agent Orange in Vietnam.

I am accompanied today by Dr. Vernon Houk and by Mr. Leslie Platt. Dr. Houk is the Acting Director of the Center for Environmental Health of the Centers for Disease Control and is the Chair of the Working Group's Science Panel. Mr. Platt is Legal Counsel to the Department of Health and Human Services and serves as the Working Group's legal counsel and staff director.

As members of the Committee will recall, the Agent Orange Working Group had its genesis in the Interagency Work Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants. The IWG was chartered by the White House in late 1979 and held its first meeting in February, 1980. Meetings of the IWG and its successor, the Agent Orange Working Group, have been held almost every month since that time. The mission of the Working Group, then as now, is to monitor, coordinate and set priorities among Federal Government research activities, to design a research agenda, and to organize the means to assure that the research agenda is carried out. Thus, the Working Group does not itself conduct any research but is charged instead with being the overall coordinator, clearinghouse and evaluator of the Federal research effort.

Since its inception, the Working Group has been advised by a scientific panel of knowledgeable scientists from the various government agencies concerned with the board issues of public health under the jurisdiction of the Working Group.

As originally structured, the Working Group was comprised of three agencies—the Departments of Health and Human Services and Defense and the Veterans Administration—as full members. The Department of Health and Human Services was designated the lead agency and the Departments of Agriculture and Labor and the Environmental Protection Agency were fully participated as observers. Additionally, the Congress' Office of Technology Assessment also participated fully as an observer, and the General Accounting Office was very early brought into the effort and has been kept abreast of developments. Also, the White House Office of Science and Technology Policy participated as an ex-officio member.

When this Administration assumed office, the excellent work of the Interagency Work Group was reviewed and a decision was made by the President to upgrade its visibility, to encourage accelerated development of research, and to broaden the availability of resources and personnel. At a White House meeting in July, President Reagan announced that he had re-established and expanded the Working Group, renamed it the Agent Orange Working Group, and raised its status to Cabinet Council working group level.

As such, the Working Group reports directly to the White House Cabinet Council on Human Resources which is chaired by Secretary of Health and Human Services Richard Schweiker. This action clearly reflects the President's commitment to the goals of the Working Group and accords the highest priority to its mission. I would like to offer for the record a copy of Secretary Schweiker's August 21, 1981, memorandum which formally re-established the Working Group (Attachment A).

Under its new charter, the Department of Health and Human Services continues as the lead agency with full participation by the Veterans Administration and the Department of Defense. Raised to the status of full participants have been the Departments of Agriculture and Labor and the Environmental Protection Agency. Also designated as full members are the Action Agency, the Office of Management and Budget, the Council of Economic Advisers, and the White House Offices of Science and Technology Policy and Policy Development. The congressional Office of Technology Assessment continues as an observer.

On August 28th of this year, the expanded Agent Orange Working Group held its first meeting. At the beginning of that meeting, and speaking as its Chairman, I wished to assure those who had worked so hard and long for the establishment and progress of the Group of the commitment of the Administration and of my position as its new chairman. With your permission, I would like to summarize for the Committee my statement at that meeting.

I said, and I believe, that the fears of possible long term adverse health effects as a result of exposure to Agent Orange are very real. They demand answers. They demand the kind of deliberate, objective research that will provide as many answers as science can give.

I said that there is no fear like the fear of the unknown. It is the mission of the Working Group to make known the unknown insofar as humanly possible.

The Working Group will not cave in to the hysteria of emotionalism that surrounds this issue. The Working Group has a responsibility to turn aside from the barrage of demands for quick and easy answers based on assumptions and fears rather than facts.

Equally so, the Working Group will not bow to any interests that might seek to sweep this issue under the rug . . . to pretend it does not exist and hope it will simply go away. This issue will not go away.

The Working Group's mission is to seek truth and to reveal openly as much truth as can be found.

On behalf of those who wonder and worry and fear we can do no less.

Mr. Chairman and Members of the Committee, a great deal of work is moving forward. Quite frankly, it is not sensational, headline grabbing activity, rather it is the quiet research inquiry of highly qualified and dedicated men and women of science.

I would like to review briefly some of this research. As you know, the Working Group is currently in the process of preparing a comprehensive, update catalogue of all relevant Federal research. We hope to have this completed in the near future and will provide it to the Committee and the public as soon as it is ready.

First, I would note that research into possible birth defects in the children of Vietnam veterans is currently being conducted by the Centers for Disease Control. This research is being conducted as a direct result of the Working Group's recommendations and is being funded jointly by the Departments of Health and Human Services and Defense and the Veterans Administration. It is designed to help find answers to one of the most serious questions facing Vietnam veterans and their families.

Second, the National Institute for Occupational Safety and Health of the Centers for Disease Control is continuing its assembly of a registry of all workers in the United States who have been involved in the manufacture of 2,4,5-T, one of the two herbicides in Agent Orange and the one which contains dioxin as a manufacturing contaminant.

This registry is designed to provide a significant data base which can be extremely valuable in supporting studies of the health of workers exposed as a result of their occupation. Thus, the registry holds real promise of providing reliable information about the effects of exposure to dioxins tha can be related and cross-referenced to other research underway on the possible adverse effects of Agent Orange exposure in Vietnam.

Third, the Air Force Ranch Hand Study has begun. It is now past the planning stages. The Air Force has begun contacting the approximately 1200 Air Force pilots and maintenance crews who were engaged in spraying herbicidies in Vietnam. Also, I would note that a formally chartered Federal Advisory Committee, which includes highly qualified scientists from outside the government, has been formed to provide close monitoring of the study.

The Advisory Committee will be chaired by Dr. John Moore, Deputy Director of the National Toxicology Program. Dr. Moore served with great distinction as Chairman of the IWG's scientific panel. Other members of the committee appointed by Secretary Schweiker are as follows:

Dr. John Doull, Professor, Department of Pharmacology and Toxicology, University of Kansas Medical Center.

Dr. Norton Nelson, Professor and Chairman, Department and Environmental Medicine, New York University, School of Medicine.

Dr. Alan Poland, Associate Professor of Oncology, McCardle Laboratory, University of Wisconsin.

Dr. Irving Selikoff, Director, Environmental Sciences Laboratory, Mount Sinai School of Medicine.

The Advisory Committee is scheduled to hold its first meeting in December at Brooks Air Force Base. Following that meeting, two additional scientists will be appointed to serve on the committee. Those scientists will be selected on the basis of their expertise in scientific disciplines deemded desirable by the committee and the Secretary to complement the broad and considerable expertise already represented on the committee.

Fourth, a preliminary protocol for the congressionally directed Veterans Administration epidemiology study of Vietnam veterans has been received from Dr. Gary Spivey of the UCLA School of Public Health. The protocol has been reviewed by the Working Group's scientific panel and the panel's comments have been forwarded to the Veterans Administration.

Additionally, a comprehensive, worldwide review of all published literature on dioxins has been completed by JRB Associates, Inc., under contract to the Veterans Administration. This literature review provides in one place, for the first time, all that is currently published on the subject in the scientific community.

These and other research activities planned and underway have been, and will be, discussed before this committee in more detail by individuals closely associated with

them. My point in briefly reviewing them is to assure the committee that the Working Group's objectives are being actively pursued.

On a related matter of considerable interest, we were recently advised of newly developed information relating to incidents of emergency herbicide jettisoning that resulted from spray aircraft malfunctions or battle damage. In some cases, these incidents appear to have occurred directly over or near American military installations.

For years, Vietnam veterans have been saying that these incidents occurred. Recognizing that what had previously been allegations and unofficial reports were now basically verified, Secretary Schweicker moved quickly to provide this information to the public. He properly felt that even though the "filling in" of details was still underway, the American people and especially Vietnam veterans and their families had a right to know of this new development.

We view these newly verified data as unfortunate in terms of the concern of those thus exposed, but also as a development that may significantly aid our scientists by providing a larger exposed population for research.

I would emphasize, regarding the avenues of research that are currently underway and those that are to come, that no one in this Administration, on the Agent Orange Working Group or elsewhere, is pre-judging the outcome of this massive inquiry. However, I would be remiss were I to fail to add a word of caution. With the exception of chloracne, all of the illnesses that are currently being attributed to exposure to Agent Orange can also be caused by a number of other factors.

Accordingly, we must keep in mind that our work may discover that those who served in Vietnam run a greater risk than other groups of suffering serious disease. We might also discover that the origin of any given disease is not peculiar to chemicals involved in defoliating procedures or, for that matter, to the Vietnam experience.

It should also be borne in mind that absolutes in terms of answers may be beyond the reach of science. It is hoped, at the very least, that interim and final research results will provide enlightened guidance for the development of basic social and legislative policy in this area.

I stress again that the Agent Orange Working Group will not be permitted to fall victim to anything remotely akin to prejudgment. We are acutely aware that anything short of our most objective, best efforts would be a grievous disservice to our veterans and to the conscience of our Nation.

I wish to thank the Committee, not simply for the honor of appearing before it, but also for the excellent support that you and your staff have accorded the Agent Orange Working Group and its Science Panel.

We are honored by the recent communication of support to Secretary Schweiker from you, Mr. Chairman, and you, Senator Cranston. Equally appreciated are your recommendations for priority consideration by the Working Group.

We are also encouraged by the many letters of support we have received from individual veterans and their families, and by the letters and personal thanks of representatives of veterans organizations, some of whom are in this room today.

I believe these expressions of support are a clear reflection of the progress we are making. They are a credit to the continuing effort of the many people who are supporting the Working Group. And most importantly, they represent a broad—and I would add—a bipartisan consensus that we are on the right track.

I believe that every Vietnam veteran can be certain in the knowledge that the Executive and legislative branches of their government are unified in their dedication to the best interests of those who served their country when called upon to do so.

Earlier in my testimony, I briefly discussed the preliminary protocol for the Veterans Administration's epidemiological study submitted by Dr. Gary Spivey. I would like to offer for the record a copy of Dr. Houk's letter, on behalf of the Science Panel of the Working Group, to Dr. Shepard at the VA regarding the protocol (Attachment B). As is obvious from the letter, the Science Panel believes we still have a long way to go before we are ready to begin the VA study. However, I believe Dr. Houk, Dr. Shepard and the other members of the Science Panel, all concur in the belief that Dr. Spivey's work, together with the new information about exposures which is now being developed, can provide the basis for finally—at long last—breaking the research design logjam that has existed because of the uncertainty about the military records base.

I pledge to you that all members of the Working Group, and especially its Science Panel, will continue to work toward the expeditious development of what we hope will be a consensus protocol for the design of that very important study. While we are disappointed that Dr. Spivey and his colleagues at the UCLA School of Public

Health were not able to move us further along, we are nevertheless hopeful that we will, in the next several months, be able to report in good conscience that all of the major elements of the Federal research effort are either in, or being put in, place.

For the record, I would offer at this point a copy of the chronology of activities of the Agent Orange Working Group which we recently made public (Attachment C).

We look forward to continuing and strengthening the close, cooperative working relationship we have enjoyed with the Committee as we move forward. Thank you.

My colleagues and I would be happy to answer any questions the Committee may have.

Attachments.

VETERANS ADMINISTRATION

VIETNAM MORTALITY STUDIES

The Vietnam Mortality Studies are designed to analyze and compare death rates and cause-of-death profiles between veterans with service in Vietnam and comparable veterans with no service in Vietnam. The studies use existing computer records to assemble a cohort of veterans and determine their mortality experience. The studies also include independent validation of the computer data bases used in the studies. By using automated records, a large number of veterans may be studied. It should be noted, however, that the mortality studies are not intended to provide definitive answers, but will instead provide information which may prove useful primarily in suggesting areas for further scientific study. In addition, it is important to note that the mortality studies do *not* address phenoxy herbicide exposure, *per se,* but only service in Vietnam.

AIR FORCE RANCH HAND STUDY

The Air Force Ranch Hand Study is a 20-year comprehensive epidemiological investigation designed to determine whether there is any causal relationship between health problems of Air Force aircrew personnel who flew on herbicide spraying missions (Operation Ranch Hand) in Southeast Asia and their exposure to Herbicide Orange. The Range Hand group was chosen for the study because its members were most likely to have been heavily exposed and they could be readily identified.

The epidemiological investigation consists of three integrated parts: (1) a mortality study (death); (2) a morbidity study (disease, including birth defects in children); and (3) follow-up (long latency of disease; e.g., cancer). The cost is estimated to be approximately $40 million.

Many thousands of personnel records have been screened and matching of a control group to the 1,264 Ranch Hand members has been completed at a ratio of 5 to 1 match for the mortality study. Matches were made by age, occupational category, and race. A 1 to 1 match for the questionnaires and physical examinations has been done. Letters were sent to the selected individuals soliciting their participation in the study.

To date, the mortality study shows 63 deaths in the Ranch Hand group: 22—killed in action; 17—accidents (aircraft, motor vehicle, drowning); 3—suicides; 1—homicide; 3—malignant neoplasms; 1—endocrine, nutritional and metabolic disease; 11—diseases of the circulatory system; 4—diseases of digestive system; and 1—etiology undetermined. The full mortality experience of the matched mortality controls (5 to 1) has not been completely ascertained.

The morbidity study includes an extensive questionnaires on the health and personal history of the Ranch Hand members and their immediate families and the controls and their immediate families. In addition, a comprehensive physical examination will be givem to all Ranch Hand members and a control group. The initial questionnaires are being administered by Louis Harris and Associates, Inc., and were scheduled to be completed in April 1982. The initial physical examinations are being conducted at the Kelsey-Seybold Clinic, Houston, Texas. They were scheduled to be completed in September 1982. With unusually high participation rates in both the questionnaire and physical examination, the expected completion dates for data collection have been revised to June and November 1982, respectively.

FOLLOW-UP

Conclusions reached from the questionnaires and initial physical examinations will form the basis for the remainder of the study. Follow-up examinations are

scheduled for up to 20 years with intermediate examinations scheduled at the 3, 5, 10, 15, and 20-year points.

Preliminary data from the mortality study will be available by the end of 1982. Data from the questionnaires will be available in June 1983 and from the physical examinations in August 1983.

The Ranch Hand study is being directed by the USAF School of Aerospace Medicine, Brooks Air Force Base, Texas.

Epidemiology of Agent Orange in Vietnam Veterans

Public Law 96-151 charged the Veterans Administration to "design a protocol for and conduct an epidemiological study of persons, who while serving in the Armed Forces of the United States during the period of the Vietnam conflict, were exposed to any of the class of chemicals known as 'the dioxins' produced during the manufacture of the various phenoxy herbicides (including the herbicide known as 'Agent Orange') to determine if there may be long-term adverse health effects in such persons from such exposure."

On May 1, 1981, the VA contracted with the Department of Epidemiology, School of Public Health, University of California at Los Angeles, to design the mandated research. Although offering information and assistance, the VA has avoided influencing the design. The initial draft design was sent to three groups for review, namely the Office of Technology Assessment, the Science Panel of the White House Agent Orange Working Group and the VA Advisory Committee on Health-Related Effects of Herbicides. The VA Advisory Committee has members from veterans organizations and thus provides a direct means to solicit comments from the veteran community. UCLA provided the protocol for peer review in January and again in March 1982.

The White House Agent Orange Working Group (AOWG) completed its review of the protocol and endorsed the design with certain recommendations for change in late March.

Agent Orange Working Group Science Panel Review of Proposed Protocol Design for Veterans Administration Epidemiology Study

[illegible]hool of Public Health University of California at Los Angeles)

The [illegible] represents a consensus of the reviewers of the proposed protocol design. [illegible]rs were present except one and his detailed comments were made available to [illegible]er members. The individual comments are enclosed (Tab B).

Overall design

We agree [illegible]storical cohort approach is the appropriate one. One member suggested [illegible]eration be given to a case control approach but all other reviewers [illegible]ot possible because there is no clear cut definition of a "case." We also agree with the approach to try to make it as compatible as possible with [illegible]er large studies such as the Ranch Hand and the Australian Study.

COHORT

Selection

The panel unanimously agrees that the Department of Defense (DOD) should select the cohorts in accordance with Dr. Bricker's cohort selection paper (Tab A). This will provide, we believe, for elimination of as much misclassification as is possible from the existing or potentially reconstructable records. We believe it is absolutely essential that the identification and assignment of these individuals to the different cohorts not be available to the participants or to the investigators until initial analysis of the data is completed. The Science Panel will oversee this cohort selection process. The study investigators must be aware of the method used to select the cohorts but must not be aware of the individuals placed in each group.

Criteria for each group

We recommend that groups be composed of high probability of exposed Vietnam veterans, high probability of nonexposed Vietnam veterans, and a non-Southeast Asia veterans group. Some felt that it would be desirable to include a Vietnam veterans group exposed midway between the first and second groups in order to make an assessment of dose response. The consensus is that though this may be desirable, the inclusion of the fourth group is not essential nor critical to the study.

Sample size

We agree that 6,000 in each cohort group is a reasonable figure. As the study progresses and as more information becomes available from other studies, this issue may need to be reexamined. DOD anticipates being able to provide 12,000 in each of the study groups for selection.

Proposed exclusions from the cohort group

We believe it is unreasonable to exclude officer and multi-tour Vietnam veteran. These may be separately identified so that appropriate analysis can take place but they should not be excluded from the study.

QUESTIONNAIRE

Questionnaire to personal health providers of the individual veterans

Some of the selected veterans may have had multiple health care providers since returning from Vietnam. The panel doubts that many private physicians will fill out detailed questionnaires on their patients and thus wonder about the usefulness of this part of the study. The needed information may have to be obtained in other ways.

Individual veteran questionnaire

The questionnaire as it now exists is unacceptable. It is overly long and uses highly technical terminology which many people including many physicians will not understand. We recommend that careful thought be given to the information that is needed to be gathered, who will administer and where the questionnaire will be administered (telephone, home visits, etc.), and that the questionnaire be redesigned to meet those criteria. The questionnaire should be limited to information that is critical to the study and will be used in the analysis of the results.

Other instruments

The psychological and nueropsychological instruments, all of which were not available for review, should be evaluated and should include only information that will be used in the analysis of the results and presented in a way that would not be offensive to the participants.

Physical examination

Data collected from the physical examination should be limited to those items that will be used in the analysis of the study. This does not mean that the physical examination should not be comprehensive as determined by the examining physician for the particular individual, although items to be used for analysis of results must be collected according to a standard protocol.

Laboratory

The final decision for the inclusion of laboratory tests for this study should be made after consultation with laboratory scientists to ensure that the best tests for that particular purpose are being used. There are other tests such as chest x-ray, spirometry, nerve conduction tests, etc., that probably have limited usefulness because of the inability to standardize and to interpret between multiple examining centers.

It is critical that the standardization of laboratory procedures proceed with quality control and quality assurance for collection, transportation, handling, and analysis and that this process be begun immediately in the participating laboratories.

Other areas of concern

For all participants, the panel believes that information should be collected only on those items that are critical to the study, can be standardized, and are such to appropriately interpret between multiple examining centers and laboratories. If the practicing physician feels that additional information is necessary for a particular patient to evaluate the health status, it obviously should be done but should not be part of the overall data collection and analysis for the purposes of this study.

It is not clear from the proposed protocol the duration of the overall study or time estimate for each individual participant. These should be determined. A possibility that should be considered in regard to future duration is that after completion of the initial examination and analysis, the cohorts names be matched against the National Center for Health Statistics (NCHS) Annual Mortality Index. This would provide nearly all of the necessary followup information and would be more efficient than a mail survey or a hands-on followup of each individual.

It should be explicity stated in the final design that when an abnormality for an individual is found, how that abnormality will be followed, who will follow and treat it, and what system will be set in place to ensure that each individual will receive the necessary medical care.

After the initial analysis has been completed and depending upon the results, additional well focused, smaller studies, such as specific case control studies, may be necessary to further define the extent of possible uncovered problems.

After the initial analysis has been completed, the method of cohort selection should be made public. While still ensuring individual confidentiality, each participating veteran should be informed of his or her status in the cohort selection process.

The panel assumes that the final protocol will address the usual concerns of patient confidentiality, freedom to withdraw from the study, and methods of providing the individual veteran specific medical information of which he or she or his or her physician should be aware for the proper care of the individual veteran.

Pilot study

We believe the Pilot study should include 5 percent of the anticipated study population. We recognize it may not be possible that this be a random sample of the population but that it be clearly stated and understood what that 5 percent represents. The panel unanimously disagrees that the Pilot Study should take place in only one study site but recommends strongly that it be conducted in all examination centers and study sites that will be used in the overall study. The Pilot Study should be used to determine participation rates and to further refine the instruments to be used in this study. An analysis of the results of the pilot study can be used to make a determination of the possibility of success of the larger study. The results should in no way be interpreted as to effects but only whether it is possible to conduct a scientifically valid overall study.

SUMMARY

On the basis of the present document, the panel believes it is possible to begin the pilot phase of the study. The selection of the cohort for the Pilot Study should immediately proceed as well as the quality control and quality assurance procedures, the redesign of the questionnaire, and the determination of comparability and interpretation of some of the proposed instruments, such as nerve conduction studies, spirometry, etc., between examining centers. Finally, we believe that major progress has been made in the past several months and that it is now possible to do the Veterans Administration Epidemiology Study, looking not only remaining factors that will prevent the successful completion of this study to be the degree of participation among the selected veterans and the nonavailability of necessary resources.

REPORT OF SCIENCE PANEL TO THE AGENT ORANGE WORKING GROUP

The Science Panel met October 20 and 22 and November 12, 1981. A summary of these meetings and other activities is as follows:

AGENT ORANGE REGISTRY OF THE ARMED FORCES INSTITUTE OF PATHOLOGY (ACIP)

Dr. Bricker presented to the panel a brief preliminary report on the Agent Orange Registry of the Armed Forces Institute of pathology containing biopsy and autopsy material of 408 veterans submitted to the ACIP as having Vietnam service. Thirty-eight percent of the specimens submitted were of skin and subcutaneous tissues. The data are very preliminary and the numbers will be expanded.

OTHER GROUPS EXPOSED

The Science Panel continues to be provided updated information by the Department of Defense on possible groups exposed to Agent Orange and other herbicides. The Panel will continue exploring this avenue in order to help define population groups who were heavily exposed and population groups who were not heavily exposed.

The Panel received a listing of 2, 4, 5-T herbicide formulations available through the GSA catalogue during the 1960's and 1970's. These have been available through normal procurement channels and could have been used in non-Ranch Hand operations in Vietnam. They were also available for use by Federal agencies in the United States, such as the Corps of Engineers spraying of waterways in the southern United States.

OTHER PROPOSALS AND STUDIES

1. Preliminary Protocol for the Vietnam Veteran Mortality Study.—The Veterans Administration provided the Panel with a Preliminary Protocol for the Vietnam Veteran Mortality Study (Tab H) using the BIRLS tapes. This item will be discussed in further detail at the next meeting of the Science Panel scheduled for December 14.

2. Cartographic Data Base Preparation Proposal to the VA from Department of Health and Social Services, State of Wisconsin.—Dr. Shepard requested that the Science Panel review the proposal from the State of Wisconsin Agent Orange Identification and Assistance Program submitted to the VA. The Chair asked for specific comments by November 20. This item will be discussed in further detail at the next meeting of the Science Panel scheduled for December 14.

3. VA Protocol for Epidemiological Studies of Agent Orange.—The Science Panel completed its review of this document and transmitted the review to the VA. A summary is as follows:

"Basically, the Science Panel had difficulty in providing a meaningful review because the document was not a protocol. Instead it appeared to consist of three parts. The first 19 pages were primarily an introduction. The second 65 pages represented a discussion of the difficulties normally faced in epidemiological studies, and the rest of the document was a literature review covering 141 pages. Every member expressed concern about the lack of details to the point that it was not possible to constructively review the proposal."

The final conclusion was that the present proposal is inadequate and the Science Panel recommends to the VA that a course of action be developed that will not cause any further unnecessary delays in attempting to answer questions about health issues in Vietnam veterans. A specific protocol should be developed.

4. Cytotoxicity of Agent Orange by University of North Dakota.—Robert H. Lenham, Special Projects Officer of the Disabled American Veterans, transmitted the proposal to Dr. Peter Beach of HHS. The Chair asked for a special review by cytogeneticists. The protocol was reviewed and the following comments returned.

Reports on the cytogenetic effects of Agent Orange on humans are inconclusive, because:

(a) Tung, et al., reported that 179 Vietnamese who lived for various periods (from 2 to 4 years) in defoliant-subjected regions had a higher frequency of chromosome anomalies, consisting primarily of breaks and gaps, than those who lived in unsprayed areas; however, a National Academy of Sciences report considered this study to be inadequate.

(b) Crossen, et al., did not find an increase of sister chromatid exchange in 2, 4, 6-T and 2, 4-D sprayers.

While a well designed and well controlled study is needed to elucidate the cytogenetic effects of Agent Orange, we have reservations about the research proposal submitted by S.M. Jalal in the present form. The reasons are:

(a) The proposal does not specify that the study be done blindly. This is essential since the scoring of chromosome damage can be subjective and so is subject to bias. We would suggest that the blood collected for Phase I be coded prior to culture. In this way, there can be no systematic bias either, in the cytogenetic preparation of the scoring. The code would be broken only after all the cytogenetic scoring is complete.

(b) Is the exposed group a "biased" sample? No information is given as to where the Vietnamese veterans will be obtained or how they will be identified regarding Agent Orange exposure. There is no one identified who is qualified to draw the bloods for the study or a stipend to support this individual.

(c) The control group is much smaller than the study group. Would it be better to have more controls? Perhaps this question could be referred to a statistician.

(d) How will the controls be selected? For what variables will they be matched to the exposed individuals? (Age, race, occupation, residence, smoker vs. nonsmoker, etc.)

(e) The proposal mentions that the SCE study will only involve 20 percent of the exposed and control groups. Will this 20 percent be chosen randomly? Will the small size (especially 3-4 controls) allow any valid conclusions to be drawn?

(f) It is not clear whether the in vitro studies (phase 2) will be performed on exposed or nonexposed individuals.

(g) We question the wisdom of limiting the preliminary clastogenetic screening (phase 2, part A) to a 3-5 hours exposure. As a result, the examined cells will have been exposed to the potential clastogen during G_2 and mitosis but not DNA synthesis. Since many chemical clastogens are most active during DNA synthesis, it is

likely that the described method will miss much chromosome damage. Perhaps the preliminary screening should be longer, and for later tests, the time span of exposure can be narrowed.

CIVILIAN EXPOSURE TO TOXIC CHEMICALS IN VIETNAM

James S. Stockdale, Chair of the Agent Orange Working Group, referred a letter from Joan M. Maiman, Chairperson of the Veterans Leadership Conference, expressing concern about civilians who served side-by-side with military troops in Vietnam not be denied inclusion in any testing and treatment and research programs that may be established to deal with possible effects of chemical exposure. After considerable discussion, the Science Panel concluded that it would be best not to involve them in specific studies that are presently proposed or underway. The Science Panel Chair will write Ms. Maiman stating that we will make special efforts to inform her group of the results of these studies.

FAT BIOPSIES

It was brought to the attention of the Panel that one State has passed an "Assistance Bill to help veterans of the Vietnam conflict who had been exposed to Agent Orange and other herbicides." Part of that bill is to establish a program to provide veterans with fat tissue biopsies. The Panel expressed serious reservations about this approach. A Subcommittee chaired by Major Phillip Brown to include Drs. Kimbrough, Honchar, Barnes, and Keller will examine the subject and report back to the Panel. The Panel will attempt to develop a position on the state-of-the-art and interpreting the results of fat biopsies.

REVIEW OF LITERATURE ON HERBICIDES, INCLUDING PHENOXY HERBICIDES AND ASSOCIATED DIOXINS

The Panel received with pleasure the completed report from the Veterans Administration.

Respectfully submitted December 1, 1981.

VERNON N. HOUK, M.D.,
Chair, Science Panel, Agent Orange Working Group.

REPORT OF THE SCIENCE PANEL

Since the last report of the Science Panel, a meeting was held on December 12. The Science Panel notes with pleasure that Dr. Peter Greenwald, Director, Division of Resource Centers and Community Activities National Cancer Institute, has been invited to membership on the Science Panel.

AGENT ORANGE TROOP EXPOSURE AND NON-EXPOSURE COHORT SELECTION CONCEPT PAPER

The Department of Defense transmitted on December 4, 1981, a proposed Agent Orange troop exposure and nonexposure cohort selection concept paper. From this concept, DOD indicated that it would be possible to identify groups of personnel down to the platoon level who have had certain characteristics of exposure to Agent Orange. These would include being within a kilometer within 7 days of fixed wing herbicide spraying, stationed in base camps with perimeter spraying, being associated with the so-called "aborted missions," etc. Other groups could be identified who would not have any of the above characteristics. An additional group could be identified from serving in the same time frame in southern continental United States bases where no herbicides were used. These groups could then be the basis of the VA Epidemiologic Study. The DOD was asked to provide and report more specific details in the next meeting.

WISCONSIN PROPOSAL FOR HERBS TAPES DATA FOR MAPPING

At a previous meeting the proposal from Wisconsin to the Veterans Administration to develop detailed, accurate, and reliable map series or atlas based on the HERBS tape data depicting the dates and locations of herbicide spraying, missions conducted in the Republic of South Vietnam had been distributed and comments requested. In general, it was felt that to be useful, the maps should be accurate and reliable. Because they would not include information on base perimeter spraying and the so called "aborted missions," it was felt they would not be scientifically useful since they would be incomplete. Using the data on the HERBS tapes alone

requires mapping on a 1:50,000 scale and would require approximately 2000 maps. The Chair will develop recommendations to the Agent Orange Working Group that contains the consensus of the entire Science Panel to be delivered to the Agent Orange Working Group at its next meeting in January.

VETERANS ADMINISTRATION MORTALITY STUDY

The preliminary protocol for the Vietnam veterans study was again discussed. Serious concerns were raised the accuracy of the DOD computerized records that are being proposed for this study. The Science Panel members had divergent views on whether the study should be of the total Vietnam veterans death records or whether sample techniques could be used. A subcommittee was formed to review this matter and make recommendations to the Science Panel at the next meeting.

VERNON N. HOUK, M.D.,
Chair, Science Panel, Agent Orange Working Group.

REPORT OF SCIENCE PANEL TO THE AGENT ORANGE WORKING GROUP

There have been several meetings of the Science Panel since my last report.

PROTOCOL REVIEW

The Science Panel completed its review of the National Cancer Institute (NCI) "A Case-Control Study of Lymphoma and Soft-Tissue Sarcoma: Association with Herbicide Exposures." It was agreed that the individual reviews will be returned to NCI. In general, the Science Panel was supportive of the proposal, and several agencies offered to help provide specific information. We further noted that this study should be complementary to the NIOSH proposed case control study on soft tissue sarcoma. The two studies are not exclusive of one another.

STATUS OF FAT BIOPSIES

The Chairman of the Fat Biopsy Subcommittee reported that the Subcommittee is developing a report to the Science Panel on fat biopsies for dioxins that will include information on (a) what is currently known and the current status, (b) when we would recommend it be done and under what circumstances, and (c) its limitations. It is anticipated that this report will be available in the near future.

ASSESSMENT OF AGENT ORANGE HEALTH HAZARDS IN THE POPULATION IN VIETNAM

Recent press reports of a group returning from Vietnam indicated that the Government of Vietnam would welcome assessment of the health risks in the Vietnam population by American scientists. There is concern about the status of the records and the avalability of those records in Vietnam. Dr. T. E. Woodward, VA distinguished physician, reported that he found the records to be useful. There was general agreement that a study would be difficult to do and difficult to interpret. We believe that assessing exposure would be virtually impossible.

PUBLIC INFORMATION

A member of the Science Panel expressed concern that the public does not have information available to counter some of the claims of adverse health effects which are not yet proven. There was general discussion of this topic. Most members feel that there is insufficient data to make firm statements on these issues at the moment.

THE VETERANS ADMINISTRATION MORTALITY STUDY

The Subcommittee reviewing the proposed Veterans Administration Mortality Study has reached consensus on recommendations to be made to the Veterans Administration. These will be forthcoming to the Chair, Agent Orange Working Group within the next 2 weeks.

REVIEW OF THE VETERANS ADMINISTRATION EPIDEMIOLOGY STUDY

The Science Panel concluded its review of the Veterans Administration Epidemiology Study proposed protocol from the University of California at Los Angeles. A detailed review has been submitted to the Chair, Agent Orange Working Group for transmittal to the Veterans Administration. In summary, on the basis of the pres-

ent document, the panel believes it is possible to begin the pilot phase of the study. The selection of the cohort for the Pilot Study should immediately proceed as well as the quality control and quality assurance procedures, the redesign of the questionnaire, and the determination of comparability and interpretation of some of the proposed instruments, such as nerve conduction studies, spirometry, etc., between examining centers.

Finally, we believe that major progress has been made in the past several months and that it is now possible to do the Veterans Administration Epidemiology Study, looking not only at Vietnam exposure but exposure to Agent Orange. We view as the only remaining factors that will prevent the successful completion of this study to be the degree of participation among the selected veterans and the nonavailability of necessary resources.

VERNON N. HOUK, M.D.,
Chair, Science Panel, Agent Orange Working Group.

MECHANISMS OF DIOXIN INDUCED TOXICITY USING THE CHLORACNE MODEL

Because of the apparent selective sensitivity of follicular epithelial cells to polyhalogenated aromatic hydrocarbons, elucidating the mechanisms of toxicity for such cells may provide a better understanding of the mechanisms of toxicity in general.

In human beings, development of chloracne is the most sensitive indicator of exposure to toxic polyhalogenated aromatic hydrocarbons. The mechanism of pathogenesis of this disease is not known. It appears that epithelial cells lining the ducts of human sebaceous follicles are primary target organs and are reflected in an abnormal pattern of retention hyperkeratosis, comedones and chloracne.

To understand the mechanisms involved in this transformation, the investigator proposes to use experimental animals for in vivo, and human skin biopsies for in vitro studies to investigate the biochemical and metabolic parameters which may be affected upon exposure to 2,3,7,8-TCDD and to polychlorinated biphenyls (PCBs). Specifically, certain enzymatic markers will be monitored during experimentally induced chloracne in hairless mice and in rabbit ears. The effects of TCDD and PCB exposure will be examined on sebaceous follicle lipid biosynthesis and androgen metabolism in in vitro assays and on the cellular kinetics of follicular epithelial cells in tissue culture. An attempt will be made to identify the localization of these aromatic hydrocarbons in the skin by using radiolabeled tracers.

EFFECT OF TCDD ON LIPID METABOLISM (DIOXINS)

Previous toxicological studies have demonstrated that TCDD given to guinea pigs and rats causes increases in the serum lipids. The objectives of this proposal are to study the effects of acute doses of TCDD on serum lipoproteins in guinea pigs, rats and rabbits. The overall plan is to characterize the lipoproteins, study lipoprotein synthesis and catabolism, and study adipose tissue mobilization of fatty acids in acute dosing experiments. Further studies will use chronic administration of TCDD to determine the effects of accumulation of the toxin on lipid metabolism as it is administered in sublethal amounts.

Birth defects study in Atlanta

CDC is conducting a case control study to determine possible risk factors associated with serious birth defects. One of the risk factors being studied is the father's service in Vietnam. Since 1968, CDC has maintained a registry of babies born with birth defects in Atlanta. A group of 7,500 babies born with defects will be compared with 3,000 babies born without birth defects. The study procedure calls for locating parents of babies in both groups and conducting extensive interviews with them. The questions cover topics that may be associated with birth defects, such as their smoking and drinking habits, family disease history, and occupations. The interview also includes questions about military service and time spent in Vietnam. CDC hopes to compare the proportion of case group fathers who served in Vietnam with the proportion of control group Vietnam veterans.

The case control study is the largest of its kind conducted anywhere to date. Planning for the study began in late 1979, and it is expected to be completed by fall, 1983. Funding will be provided by CDC, DOD and the VA.

Worker registry

NIOSH is establishing a registry of workers potentially exposed to dioxins during the manufacture of the herbicide 2,4,5-T and in chemical spills involving the sub-

stance. NIOSH will collect medical and employment records for each worker. The registry will serve as a data base for studies to help identify any long term adverse health effects in dioxin workers and to determine whether the cause of death of former dioxin workers differs significantly from that expected in the general public or in other groups of workers. The registry may also help determine whether there are adverse effects to workers' reproductive systems or birth defects or other abnormalities in the children of exposed workers. The techniques used in establishing the registry will conform to those used by the World Health Organization so that results of these studies can be compared in those in other countries.

Other NIOSH dioxin studies

1. NIOSH began a study in 1979 to determine whether employment at the Bluegrass Army Depot in Madison County, Kentucky, results in excess risk of developing adult leukemia. All cases of adult leukemia in the county over a 10-year period are being studied. NIOSH is now identifying leukemia cases and establishing a control group for this study.

2. NIOSH is assessing children of Long Island Railroad workers to determine whether there is an excess of congenital abnormalities in the group. The Long Island Railroad used 2,4,5-T to control foilage along railroad tracks. The NIOSH study is being done at the request of the Teamsters Union, Local 808 in New York.

3. In 1980 NIOSH reviewed reports of four groups of workers exposed to phenoxy herbicides and chlorophenols potentially contaminated with dioxins. The purpose of the study was to determine whether such exposure leads to excess risk of developing soft tissue sarcoma. Of the 105 deaths reported in the four groups, 3 were due to soft tissue sarcoma. By comparison, only 0.07 percent of the deaths in U.S. males during 1975 were due to soft tissue sarcoma. NIOSH is identifying a study population for an expanded study.

4. NIOSH also is investigating an association between occupational exposure to herbicides such as 2,4,5-T and the development of a malignant tumor known as soft tissue sarcoma. This association was first reported in 1979 in two epidemiologic studies from Sweden, and recently has been corroborated by a review at NIOSH of data from U.S. workers. Further epidemiologic study is required to confirm the association, and such studies are underway at NIOSH. In particular, NIOSH is beginning an epidemiologic case-control study for soft tissue sarcoma to ascertain whether a group of people with soft tissue sarcoma report occupational exposure to the suspect materials significantly more often than controls without the tumor.

NIEHS

NIEHS is conducting basic research using in vitro and in vivo studies on the underlying mechanisms of the biological effects of TCDD, the carcinogenic ingredient of Agent Orange. The studies look at metabolism of TCDD in animals and effects of the substance on skin.

NIEHS is planning to establish an international registry of persons occupationally exposed to dioxin in accidents in northern Europe and Italy.

Current Status of FDA Dioxin Methodology Development

SUMMARY STATEMENT

FDA is currently concerned with developing improved methods for isolation analysis and confirmation of TCDD and other dioxins in foods and feeds.[1] Current projects include developments of a multi-column high performance liquid chromatographic (HPLC) procedure for cleanup of fish samples prior to capillary column GC/EC (gas chromatography with electron capture detection) examination and MID (multiple ion detection) GC/MS confirmation of the identity of the TCDD in the extracts, evaluation of the Fish and Wildlife Service extraction-cleanup procedure for 2,3,7,8-TCDD; and evaluation of the Dow extraction-cleanup procedure for 2,3,7,8-TCDD.

The multi-column HPLC extraction-cleanup procedure involves digestion of 20g fish tissue at room temperature in 20 percent KOH solution, hexane extraction, washing with concentrated sulfuric acid and cleanup of the hexane extract by passage through three tandem HPLC columns as follows: (a) Zorbax PMS 60 S (6.2 mm i.d. x 50 cm; 93/5/2 hexane/MeOH/CH_2 Cl_2; 1 mL/min.); (b) Zorbax C-8 (4.6 mm i.d. x 50 cm; 75/25 CH_3CN/H_2O; 2.4 mL/min.); and (c) Zorbax C-18 (4.6 mm i.d. x 50 cm; 100 percent CH_3CN; 1.2 ml/min). Both fortified (60 ppt TCDD for recovery determi-

[1] No dollar amount reported.

nation) and unfortified samples are examined. Evaluation of the precision of the multi-column HPLC procedure was determined by quadruplicate analyses of fortified (60 ppt) and unfortified carp and catfish samples. Relative standard deviations of less than 15 percent were obtained. Recoveries of 2,3,7,8-TCDD obtained with the procedure averaged 57 percent (C.V.=14 percent). The procedure is isomer specific for 2,3,7,8-TCDD. As little as ca 15 ppt of 2,3,7,8-TCDD can be detected and confirmed in fish tissue.

The Canadian Health Protection Branch and FDA recently completed a round-robin to check performance of laboratories conducting TCDD analyses. Four fish samples (a control sample and three trout samples containing 30–60 ppt of bioincurred TCDD) were analyzed by eight collaborating laboratories in the United States and Canada, each laboratory using its own methodology. Precision (relative standard deviation) of the analytical values from the eight reporting laboratories varied from 14 percent to 26 percent for the three trout samples, remarkably good for ppt level determinations.

EPA's Research Related to Agent Orange

BACTERIAL DECOMPOSITION OF TCDD

2,3,7,8-TCDD is generally very persistent once it escapes into the environment. This is particularly the case for 2,3,7,8-TCDD in soils, where the half-life of the substance is on the order of years. EPA is sponsoring a research project which seeks to isolate bacteria which are capable of degrading 2,3,7,8-TCDD much more rapidly.

Scientists have already successfully isolated a bacterium which will decompose 2,4,5-T, one of the principal components of Agent Orange. A similar technique is now being applied to the case of 2,3,7,8-TCDD.

EVALUATION OF MUNICIPAL WASTE COMBUSTORS

During the past few years a number of studies have shown that 2,3,7,8-TCDD and a number of other polychlorinated dibenzo-p-dioxins (PCDDs) can be emitted from facilities which are burning municipal wastes. The extent of these emissions and their significance has recently been evaluated by EPA in an interim analysis. After sampling five municipal waste combustors in this country, the Agency concluded that the levels found do not constitute a public health concern. Additional studies on such facilities are planned in the future.

EVALUATION OF LARGE SCALE COMBUSTION SOURCES

In addition to municipal waste combustors, EPA is investigating emissions from other large scale combustors; e.g., coal-fired power plants, for the presence of a variety of organic pollutants, including 2,3,7,8-TCDD.

INVESTIGATION OF BIOAVAILABILITY TO FRESHWATER FISH OF TCDDS IN FLYASH

TCDD emissions from combustion sources are often associated with particulate matter. Very limited toxicological studies have been performed using such material. It is known from lab work, however, that the TCDDs are difficult to remove chemically. Questions have been raised about whether or not the TCDDs could be removed by biological processes once they enter the body and thereby become available to exert a toxicological effect.

This research project will investigate a relatively simple biological system as a first step in addressing this bioavailability question.

ANALYSIS OF ENVIRONMENTAL SAMPLES FOR PCDDS AND PCDFS

EPA maintains an on-going program for the analysis of 2,3,7,8-TCDD and related compounds in environmental samples. During the coming year an increasing number of such samples are expected to come from "Superfund"-related activities; e.g., abandoned dump sites.

Veterans Administration (VA), Scientific Activity Report, Agent Orange Working Group, January 21, 1982

Title of activity:

1. Review and Analysis of Literature on Phenoxy Herbicides and Dioxin.
2. Epidemiology of Agent Orange in Vietnam Veterans.

3. TCDD Assay of Human Fat.
4. Birth Defects and Military Service in Vietnam.
5. Vietnam Veteran Mortality Studies.
6. Urinary 6-Hydroxy Cortisol; Physiologic and Pharmacologic Studies (including Agent Orange).
7. Effect of TCDD on Lipid Metabolism.
8. Mechanisms of dioxin induced toxicity using the Chloracne model.

REVIEW AND ANALYSIS OF LITERATURE ON PHENOXY HERBICIDES AND DIOXINS

Public Law 96-151, enacted December 20, 1979, required the Administrator of Veterans Affairs to "conduct a comprehensive review and analysis" of the worldwide literature on Agent Orange and other phenoxy herbicides. The goal of this report was to present a balanced and critical review of the current state of published scientific literature relevant to the problem of exposure to herbicides, particularly, phenoxy herbicides used in Vietnam. The contract for this review was awarded to JRB Associates, Inc., of McLean, Virginia, and submitted in final form to the VA in October 1981. For the purpose of this review, JRB Associates used an expanding and reiterative search strategy and a scientific relevancy criteria. Over 1,400 documents were acquired and examined. About 1,200 were judged to fall within the relevant parameters. These documents underwent an extensive review and analysis and the report was prepared with a supporting bibliography.

The literature search is expected to assist researchers, both those in government and in the private sector, to identify opportunities for the systematic development of new knowledge based on what is already known and published.

Copies of the report have been provided to the House and Senate Veterans Affairs Committees (both of which have exercised close supervision of VA's response to veterans concerned about Agent Orange) and to the Board of Veterans Appeals.

Copies were sent also to the National Academy of Sciences (NAS), the Congressional Office of Technology and Assessment, VA's Scientific Advisory Committee on Herbicides and an interagency Agent Orange Working Group, all of which have been cooperating in the massive research effort. The VA has also given a copy of this report to the government of Australia.

TCDD ASSAY OF HUMAN FAT

The purpose of the TCDD Assay of Human Fat (adipose tissue) was to initiate a small feasibility trial which would assist in determining whether TCDD could be measured in the fat tissue of Vietnam veterans and a control sampling of non-Vietnam veterans. The study required a surgical biopsy of specimens of abdominal fat extracted from research participants. The specimens were assayed by an ultra-high resolution mass spectrometer after gas-liquid chromatography. Specimens analyzed by the University of Nebraska were subsequently re-assayed by the Environmental Protection Agency. The analysis of adipose tissue from 20 Vietnams veterans claiming exposure to Agent Orange, 10 non-Vietnam veterans and 3 Air Force Officers having a documented exposure history to TCDD, revealed that exposure and health status did not correlate with detected levels of TCDD. Nevertheless, the results indicated that the assay method was feasible, but too delicate and difficult to be a useful assay method at this time.

URINARY 6-HYDROXY CORTISOL: PHYSIOLOGIC AND PHARMACOLOGIC STUDIES (INCLUDING AGENT ORANGE)

6-hydroxy cortisol is a polar metabolite of cortisol formed in the endoplasmic reticulum of liver cells be mixed function oxygenase systems (MFOS) which are also responsible for the metabolism of many drugs and polycyclic hydrocarbons. The investigator has developed a sensitive redioimmunoassay for 6-hydroxy cortisol in human urine. He intends to utilize this method to further characterize the normal and abnormal physiology of 6-hydroxy cortisol, to investigate dogs and humans exposed to carcinogens such as those in cigarette smoke and to investigate the impact of 2,3,7,8-TCDD on hepatic microsomal induction.

The information will be used to determine whether urinary 6-hydroxy cortisol can be helpful in assessing any continuing effects of herbicides and TCDD in exposed humans.

Worker registry

NIOSH is establishing a registry of workers potentially exposed to dioxins during the manufacture of the herbicide 2,4,5,-T and in chemical spills involving the substance. NIOSH will collect medical and employment records for each worker. The registry will serve as a data base for studies to help identify any long term adverse health effects in dioxin workers and to determine whether the cause of death of former dioxin workers differs significantly from that expected in the general public or in other groups of workers. The registry may also help determine whether there are adverse effects to workers' reproduction systems or birth defects or other abnormalities in the children of exposed workers. The techniques used in establishing the registry will conform to those used by the World Health Organization so that results of these studies can be compared in those in other countries.

Other NIOSH dioxin studies

1. NIOSH began a study in 1979 to determine whether employment at the Bluegrass Army Depot in Madison County, Kentucky, results in excess risk of developing adult leukemia. All cases of adult leukemia in the county over a 10-year period are being studied. NIOSH is now identifying leukemia cases and establishing a control group for this study.

2. NIOSH is assessing children of Long Island Railroad workers to determine whether there is an excess of congenital abnormalities in the group. The Long Island Railroad used 2,4,5–T to control foliage along railroad tracks. The NIOSH study is being done at the request of the Teamsters Union, Local 808 in New York.

3. In 1980 NIOSH reviewed reports of four groups of workers exposed to phenoxy herbicides and chlorophenols potentially contaminated with dioxins. The purpose of the study was to determine whether such exposure leads to excess risk of developing soft tissue carcoma. Of the 105 deaths reported in the four groups, 3 were due to soft tissue sarcoma. By comparison, only 0.07 percent of the deaths in U.S. males during 1975 were due to soft tissue sarcoma. NIOSH is identifying a study population for an expanded study.

[Memorandum]

VETERANS' ADMINISTRATION,
July 15, 1982.

To: Members, Science Panel, Agent Orange Working Group.
Subject: Cohort Selection—Agent Orange Epidemiological Research.

1. Working from the December 4, 1981, DOD exposure concept paper, there appear to be three critical elements in the selection of study cohorts which must be addressed simultaneously: (a) Records Review, Evaluation & Abstraction; (b) Exposure Classification; (c) Sampling Methodology. All three elements must be clearly defined and a cohort selection protocol developed prior to initiating this process.

2. Following is a general outline of Army Agent Orange Task Force Selection procedures based largely upon what they are already doing.

Step I. Develop an enhanced multi-service, multi-mode, Herbs Map showing high and low Agent Orange concentration in South Vietnam.

Step II. List All Possible Battalions: (1) Battalion exposure criteria must be defined, (2) high likelihood of exposure, and (3) low likelihood of exposure.

Step III. Lists of Selected Battalions (1) Rules for selection must be defined. (a) Records; Quality; (b) Other (e.g. comparability, branch of service? . . .). (2) Sampling procedures, if any, must be defined. (3) Battalions not selected must be evaluated, possibly by sampling.

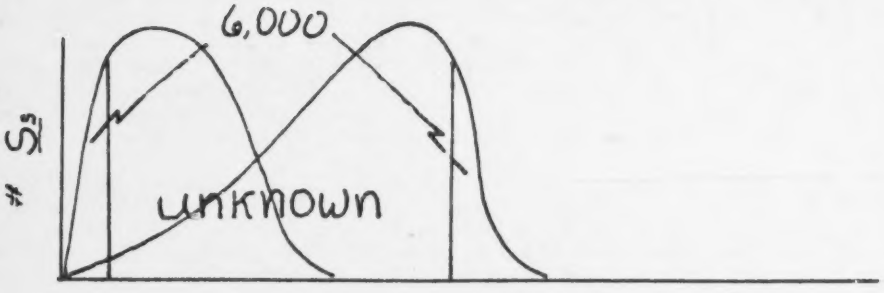
Step IV. Lists of All Possible Companies from Selected Battalions.

Step V. Lists of Selected Companies: (1) Rules for selection must be defined. (a) Records quality; (b) Number of "Hits" (Exposure criteria must be defined); (c) Other (e.g. comparability, branch of service? . . .). (2) Sampling Procedures, if any, must be defined. (a) Percent misclassified (Companies from High Battalions with no hits); (b) Do we reclassify? (3) Companies not selected must be evaluated, possibly by sampling.

Step VI Lists of all Possible Individuals from Selected Companies.

Step VII Lists of Selected Individuals; (1) Rules for selection must be defined. (a) Number of "Hits"; (b) Other (e.g. comparability, branch of service . . .). (2) Sampling procedures, if any, must be defined. (a) Percent Misclassified (individuals from High Companies with no hits); (b) Do we reclassify? (3) Individuals not selected must be evaluated, possibly sampled.

(3) Without adequate sampling procedures we will end up with cohorts thaken from unknown distributions:



We will not have estimates of any of the parameters of these distributions, or any of the distributions of potential confounders such as MOS, Branch of Service, Age, etc. This selection procedure may produce high and low exposure likelihood cohorts which are dissimilar in important ways. If, for instance, race turned out to be confounded with exposure, it would be necessary to stratify for race before analysis. It could become Impossible to analyze these data.

(4) Unequal Branch of Service Sampling (3000 Army, 1500 Marines, 750 Air Force, 750 Navy) will result in a loss of power in the analysis. Subgrouping defined by Branch of Service may not support reasonable analysis if further stratification for confounders is needed due to selection, or other, considerations.

MAURICE E. LEVOIS,
Director, Agent Orange Research and Education Office.

II. THIRD COHORT

The AOWG Science Panel has recommended that the VA's epidemiology study include a third cohort in order to look at the broader issue of possible health effects resulting from service in Vietnam. Selecting appropriate health outcomes to adequately represent possible health effects of the "Vietnam experience", rather than only Agent Orange effects, has been mentioned by OTA as a potential problem. It is not too difficult to address this issue. The range of health data included in the UCLA protocol is already very broad. The authors note that their choice of outcomes to be examined relied as much on press reports of Vietnam veteran's health problems as it did on the limited scientific literature on the effects of exposure to phenoxy herbicides (Appendix G of the UCLA protocol). If the VA is prepared to conduct an expanded health evaluation, then health outcomes of interest representing the entire "Vietnam experience" could be built into the study.

Representative sampling is a problem not so easily addressed. There are really two related problems in this area.

(1) The UCLA authors have pointed out that Vietnam veterans who did not go to Vietnam may differ in important ways from those who did serve in Vietnam and survived. How they might differ is not explained. It is reasonable to suppose that military training, physical fitness, willingness to take risks and the proven ability to survive a war, are four dimensions which could contribute to very different health profiles for the Vietnam and non-Vietnam groups, having nothing to do with exposure to Agent Orange. This problem, of finding a perfectly comparable third cohort, can never be totally solved. It will be important to identify and evaluate the potential size and direction of health differences thought to exist in these groups before we proceed with a third cohort.

(2) Another sampling problem arises when we attempt to conduct both a "Vietnam experience" study, and an Agent Orange study, using three cohorts. The high and low Agent Orange exposure-likelihood cohorts must be as similar as possible on all other factors which cannot be objectively measured. Combat stress is one example of an important potential confounding factor which is difficult to measure at the level of the individual soldier. Combat stress should be controlled by selecting both Agent Orange exposure cohorts from combat units thought to be equivalent in terms of exposure to stress. Ideally, the high and low exposure cohorts should be equivalent in every way except exposure to Agent Orange. Unfortunately, this ap-

proach reduces the generalizability of the study. If only combat veterans are sampled, just a fraction of all the troops who served in Vietnam will be represented.

Do the high and low Agent Orange exposure cohorts, as presently defined in the protocol, adequately represent the "Vietnam experience" (i.e. all of the health risks encountered by Vietnam veterans)? I don't think so. However, with careful cohort selection, and very clear cohort definition, the "Vietnam experience" represented by subjects in the two Vietnam cohorts could represent the most salient aspects of the experience.

The AOWG Science Panel has recommended a balanced emphasis on both the broader issue of evaluating all health risks associated with service in Vietnam, and the narrower question of the effects of Agent Orange. This will ultimately require some compromise in the design of both studies. This will also require further delay while these issues are debated, incorporated into the protocol, reviewed and approved.

PREPARED STATEMENT OF HON. TOM DASCHLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. Chairman, I appreciate your willingness to hold these hearings today and allow me to be a participant.

In my four years in the Congress I have not faced an issue as frustrating and perplexing as Agent Orange. Nonetheless, a major step forward was achieved last year with the passage of legislation (PL97-72) approving priority health care and medical treatment for Vietnam Veterans suffering from the effects of Agent Orange. The House of Representatives and the Senate unanimously agreed that this was a necessary and reasonable step to assure Vietnam Veterans of our commitment to their concerns until the various scientific studies shed more light on the complexities of this issue.

From the beginning I have had doubts about the Veteran Administration's ability and commitment to fulfill the mandate in Public Law 96-151, which ordered the VA to conduct an epidemiological study into the effects of Agent Orange on Vietnam Veterans. Unfortunately, my worst fears have come true and I believe that certain parties in the VA are deliberately trying to delay the Agent Orange study. Mr. Chairman, this study was ordered nearly three years ago and it hasn't even begun. I believe the reason the VA is delaying the inception of this study is that they do not want to face the ultimate decision of compensating Vietnam Veterans and their families. This is evidenced by the fact that the VA has still not developed a statutory framework for the resolution of veterans claims, despite the fact that a number of scientific studies outside the VA will be completed within the next several months. To add insult to injury, the VA has admitted that it will be 1988 or 1989 until this study is completed. This is unacceptable and I am outraged.

This past March, two scientific review panels, the Office of Technology Assessment (OTA) and the White House Agent Orange Work Group Science Panel approved a protocal design for the VA study as well as an exposure index developed by the Army Agent Orange Task Force. The exposure index will be used in selecting study cohorts of veterans who were or were not exposed to the herbicide during their service in Vietnam. Virtually every relevant agency in the Federal government is represented on the Science Panel or the Work Group, including the Departments of Defense, Labor, Health and Human Services, Agriculture, EPA, OMB, National Cancer Institute, Center for Disease Control, National Institute of Occupational Safety and Health (NIOSH), National Institute of Environmental Health Sciences (NIEHS), OTA, the VA and others.

Despite the approval of all these agencies, the VA decided in May, four months after submitting the second protocol design to the Science Panel and OTA, that yet another scientific review was necessary. This additional review, conducted by the National Academy of Sciences is still underway.

Then, in July, the VA announced to the Science Panel that the exposure index previously agreed to needed further refinement. Today, six months after the initial agreement on the index had been reached, and two months after announcing their dissatisfaction to the Science Panel, the VA has still not finalized and sent to the DOD the changes they now seek to make so the Army Agent Orange Task Force can continue their process of cohort selection.

The VA has had innumerable problems since this effort first began including the rejection of the initial protocal design. I believe these problems have been the direct result of a lack of in-house expertise in this area. At this very moment the VA still does not have an epidemiologist on board and I believe that many of their problems

are directly related to this lack of in-house expertise. A full time epidemiologist should be hired immediately so that crucial decisions relative to the study are made by an expert in the field.

Mr. Chairman, the delays in this study are an unconscionable affront to the dignity of Vietnam Veterans and their families. Vietnam Veterans will not stand for it, the American people will not stand for it and the U.S. Congress most certainly will not stand for it. Unless the VA decides on final exposure criteria as well as whether to include a third cohort of veterans who didn't serve in Vietnam within 7 days of this hearing and begin a planned pilot study within 30 days, I believe that this committee should take action to relieve the VA of all responsibilities relative to this long delayed study. I am having legislation drafted at this moment to achieve this end.

Finally, it is time to take action with respect to compensating Vietnam Veterans with soft tissue cancers. Three Swedish epidemiological studies have documented increased soft tissue cancer rates in Swedes exposed to herbicides containing dioxin. In addition, a National Institute of Safety and Health (NIOSH) dioxin registry has revealed significantly higher rates of soft tissue cancers in U.S. industrial workers exposed to dioxin. Considering this plethora of scientific data and the fact that soft tissue cancers are exceedingly rare in young age groups, compensation is not out of order.

Mr. Chairman, Vietnam Veterans deserve better than to wait until 1988 or 1989 for the VA to provide answers. Every other government body now conducting research on Agent Orange, including the Air Force and Center for Disease Control, will be providing clues to the specific hazards of Agent Orange no later than the end of next year. Even the Australian government, which sanctioned their own studies long after Congress was forced to order a study, expect to complete all their efforts next year.

As Franklin Delano Roosevelt once said, "The only limits on the realization of tomorrow are our doubts today." Mr. Chairman, there already exist too many doubts about this study to allow these delays to go on.

[From The Lancet, Jan 31, 1981]

2,4,5-T, Trichlorophenol, and Soft Tissue Sarcoma

Sir,—Case-control studies from Sweden demonstrate relative risks of 6·2 and 5·1 for occupational exposure to phenoxy herbicides and chlorophenols among cases of soft tissue sarcoma. To estimate whether this excess risk can be detected among workers in the United States, we reviewed reports of four exposed cohorts (refs 3–5 and J. A. Zack unpublished) studied by epidemiologists from Dow Chemical U.S.A. and the Monsanto Company. Of the 105 deaths reported in the four cohorts, 3(2.9 percent) were due to soft tissue sarcoma. In rough comparison, for 1975 only 0.07 percent of deaths in U.S. males aged 20–84 years were due to soft tissue sarcoma (ICD 171, 8th revision).

The workers from the four U.S. cohorts were exposed either to the phenoxy herbicide 2,4,5-trichlorophenoxyacetic acid (2,4,5–T) or to 2,4,5-trichlorophenol (TCP), a feedstock for 2,4,5–T. Both 2,4,5–T and TCP are contaminated with the toxic dioxin isomer 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) which has been found to be carcinogenic in laboratcry animals.

Zack and Suskind describe a male with chloracne after exposure in a TCP process accident at Monsanto Co. in 1949. He died in 1978 at age 58 with malignant fibrous histiocytoma of soft tissue origin. (In the paper by Zack and Suskind this case is coded as ICD 173·9; however, when the diagnosis was presented to our consulting nosologist, ICD 171 was the code of choice.) Cook et al. reported a male who worked on TCP production at Dow Chemical U.S.A. and had facial dermatitis; no diagnosis of chloracne was made. He died of fibrosarcoma in 1975 at age 53. Case 3 (J. H. Zack, unpublished) worked on 2,4,5–T synthesis at Monsanto Co. and died in 1972 at age 49 of a generalised liposarcoma. No history of chloracne was reported. Only one cohort, reported by Ott et al. of 2,4,5–T workers at Dow, contained no case of soft tissue sarcoma.

None of the four cohorts individually resulted in a reported excess risk for soft tissue sarcoma. When combined, however, the three cases from the four cohorts suggest a common pattern. This finding supports the concept of combining small cohorts of workers with a common occupational exposure for analyses. Such an effort to assemble an exposure registry of all people in the U.S. who have worked at the synthesis of 2,4,5–T is underway at the National Institute for Occupational Safety

and Health (N.I.O.S.H.) the mortality experience of the combined cohort will be analysed retrospectively and followed up prospectively. This approach will provide greater statistical power than would be available for any subgroup of the registry analysed alone. N.I.O.S.H. has also embarked on a case-control study for soft tissue sarcoma to review occupational risk factors such as exposure to the phenoxy herbicides and chlorophenols, and to test further the results obtained in the Swedish case-control studies.

P. A. HONCHAR,
W. E. HALPERIN,
Industry-wide Studies Branch,
Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH.

[From the New England Journal of Medicine, May 6, 1982]

THORACIC SOFT-TISSUE SARCOMA IN VIETNAM VETERANS EXPOSED TO AGENT ORANGE

TO THE EDITOR: Case-control studies from Sweden report a fivefold to sixfold increased risk of soft-tissue sarcoma in lumberjacks exposed to herbicides containing phenoxyacetates. Long-term follow-up studies in cohorts of industrial workers employed in the manufacture of these chemicals have disclosed seven cases of soft-tissue sarcoma to date. On the basis of studies in laboratory animals, it is currently thought that dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin), an impurity present in these chemicals, may be the carcinogen. However, more follow-up and further studies are needed to define the true risk of malignant disease and the actual carcinogenic substance or substances involved.

In Vietnam, where approximately 2 million troops were stationed for various periods between 1962 and 1971, nearly 45 million kg of Agent Orange and other defoliants were used. Follow-up of the veterans and their families to date has not revealed any serious untoward effects of such exposure, except for chloracne. So far there has been no excess incidence of cancer of any kind. We now report three cases of thoracic soft-tissue sarcoma in persons who served in Vietnam and were exposed to Agent Orange.

Patient 1 worked in Vietnam as a member of a helicopter-rescue unit of the United States Air Force in areas where defoliants were used during 1966 and 1967. In July 1979, at the age of 46, he underwent resection of a right upper-lobe lung lesion, which was diagnosed as inflammatory fibrous histiocytoma. He died in July 1981 with progressive lung and brain lesions.

Patient 2 was a United States Marine in Vietnam during 1966 and 1967, stationed in areas where defoliants were being used. Twice he was "completely soaked with Agent Orange." In December 1979, at the age of 32, he underwent a left pneumonectomy for a mediastinal fibrosarcoma. In June 1981, pulmonary metastases developed. He is currently receiving combination chemotherapy.

Patient 3 was in the United States Army in Vietnam in 1971, serving in areas where defoliants were used. In January 1981, at the age of 31, he was evaluated for a left pleural effusion. At exploratory thoracotomy in August 1981 a pleural/diaphragmatic leomyosarcoma was noted and resected.

Soft-tissue sarcomas are rare neoplasms. If there is a true risk of these neoplasms in veterans who served in Vietnam, follow-up studies should be able to define it. If there is an increased risk of malignant disease in these veterans, then a more critical question that has to be addressed is: Are the defoliants causative, or is some other unidentified environmental factor responsible, acting alone or in concert with the defoliants?

P. RAVI SARMA, M.D.,
JULIAN JACOBS, M.D.,
Emory University School of Medicine.

CHAIRMAN MONTGOMERY TO ADMINISTRATOR NIMMO

Question 1. Why was it necessary to seek yet another scientific review of the UCLA protocol after the Office of Technology Assessment (OTA), the White House Agent Orange Working Group, and the VA's own Advisory Committee had already approved it? Which individual(s) made this decision?

Answer. The Veterans' Administration has consistently stated that it was extremely important the epidemiological study mandated by Public Law 96–151 be conducted in a thoroughly scientific manner such that total objectivity be achieved. Only then, would the study's results be considered credible. Towards that end, in February 1980, the Administrator advised the Chairman of the Senate Committee

on Veterans Affairs that the study design would be reviewed by a non-Federal scientific body with unquestioned epidemiologic expertise; that body was identified as the National Academy of Sciences.

In addition, Public Law 96-151 directed that the epidemiological study be fully coordinated with those planned, being conducted or completed by other Federal agencies. Further, in a memorandum from the Assistant to the President for Domestic Affairs and Policy to the Secretaries and Administrator for each Federal department and agency then represented on the Interagency Work Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants (the predecessor to the Agent Orange Working Group) the Work Group was specifically directed to provide assistance to the Veterans Administration in its conduct of the epidemiological study. Accordingly, the Work Group and its successor have been actively consulted throughout the protocol development.

The Congress, itself, directed that the epidemiological study be conducted only in accordance with a protocol approved by the Director of the Office of Technology Assessment (OTA). As you may recall, the President directed the Administrator not to treat the approval provision as legally binding. However, in order to keep the Congress fully informed throughout the protocol development, there have been frequent contacts with various members of the staff of the OTA. Their recommendations concerning the protocol have been sought and have been incorporated. Their assistance has been valuable and we are grateful to them for it.

Finally, we believe it is important to seek the advice and recommendations of the Veterans Administration Advisory Committee on the Health-Related Effects of Herbicides. A wide variety of interests, concerns, and opinions are represented on that Committee. Additionally, of particular interest to us where the views of those members of the Committee who were members of various veterans' organizations. Through the mechanism of the Advisory Committee, their views could be made known directly to this agency on the protocol development and other aspects of the epidemiological study.

Question 2. Dr. Jack Moore, former Chairman of the White House Work Group Science Panel suggested in 1980 that the VA conduct a mortality study of Vietnam Veterans. Why did it take until this summer to decide to go ahead and do this.

Answer. The VA, in fact, did not wait until this summer to go ahead, but has been working continuously since June 1980 on a Vietnam veteran mortality study. By fall of 1980 the VA had prepared a protocol which was given informal approval by Dr. Jack Moore and other Science Panel members. The VA, with cooperation from Department of Defense, set about assembling the necessary date files.

When the VA reported its progress to the newly reconstituted Science Panel in October 1981 that group suggested a considerable expansion of the study in progress. The VA agreed to their suggested changes and set about revising the protocol and obtaining additional funds necessary to accomplish the enlarged study.

VA's progress to date on the mortality study includes the following: data files assembled, draft protocol written and revised research budget prepared and funded, and requests for proposals (RFP) issued for two supporting contracts. The proposals submitted in reply to these RFP's have been reviewed by a technical panel. Pending receipt of requested additional information from the bidders due to VA by October 8, contracts for data collection should be awarded shortly.

Question 3. The VA's Agent Orange Registry shows that about 20 percent or 19,000 of the 96,000 veterans examined have skin afflictions. Has the VA looked at all 19,000 in making their statement at the hearing that only 12 or 13 had chloracne? If not, how many of these 19,000 have been looked at?

Answer. A review of denial claims for disability was undertaken in response to an expressed concern that there were cases of chloracne which were not correctly diagnosed and this led to improper denials of service connection. The review focused on those cases which had been denied up to the time the reveiw commenced. There were then approximately 3,200 denied claims. A medical doctor reviewed the rating decision sheets for these claims and identified about 300 cases of chloracne could possibly be present. The full medical records for 225 of these were able to be obtained and were reviewed by a physician acquainted with chloracne. Thirteen individuals as described in their medical records presented skin conditions sufficiently like chloracne to warrant a detailed physical examination by an expert in dermatology. Arrangements are now being made for these examinations to be performed at nationally recognized clinics that are independent of the VA. The results of these examinations will be incorporated in the veterans' medical records. They will also be reviewed by the Department of Veterans Benefits to ensure that a correct rating determination had been made. Based upon our experience in this effort, we will then determine whether to expand the review to include other claimants.

There are currently some 95,000 Vietnam veterans in the Agent Orange Registry. Approximately 67,000 of these have had the reports of their examinations entered into the computerized record system and are available for review. Many of these veterans have no present complaints or findings of illness; 26,626 report symptoms and 25,081 of these include the observation of some skin disorder. Almost all of these disorders are diseases common for the veterans' age group: fungal infections such as athlete's foot, pigmentation problems, acne, and other superficial conditions. None has so far been unequivocally diagnosed as chloracne although several have been suspected of being the disorder.

Question 4. When does the VA plan to establish a statutory framework for determining how much and precisely what kind of evidence it will take to compensate Vietnam Veterans and their families for the various illnesses and disabilities attributed to Agent Orange exposure?

(A) If the VA does plan to develop such a framework, will it be completed before the Air Force and Center for Disease Control report on the initial findings of their respective studies?

(B) Why hasn't such a model been developed before?

(C) If the VA doesn't plan to develop such a model, is it their belief that they need further instructions from Congress to do so?

Answer. The VA already has ample statutory authority to compensate veterans or their survivors for disabilities or death due to injuries and diseases incurred or aggravated in service. 38 U.S.C. §§ 310 et seq., 410 et seq. A new statutory framework is not required. What is lacking is a scientific basis upon which it can be reasonably concluded that long-term adverse health effects (other than chloracne) have resulted from exposure to herbicides in Vietnam. It is deeply hoped that the Air Force and CDC studies will further this scientific inquiry.

Question 5. After stating for years that animal studies could not be used to correlate dioxin's effects on humans, the VA has recently awarded $4.7 million for Agent Orange research exclusive of the epidemiology study. Does this mean that the VA will accept animal studies as evidence for paying compensation?

Answer. Various animal species react differently to the same substance. Dioxin or TCDD given by mouth to guinea pigs is at least 500 times as lethal as it is for dogs when the amount given is corrected for the differences in the animals' weight. Cats are stimulated by morphine; dogs are depressed. Such differences make it difficult, if not impossible, to accept the results obtained in one or several species when given dioxin as firm indicators of what dioxin does to humans.

$4.7 million was made available in fiscal year 1982 for Agent Orange related research, agent Orange information activities and support of the Agent Orange Research Projects Office. Of this amount, $3,020,000 was designated for the epidemiology study. For the final quarter of fiscal year 1982, $191,052 was for Agent Orange research related to animal studies. For fiscal year 1983 and beyond, $2,173,481 represents the total dollars approved for funding the 10 approved specially solicited research projects.

Animals are used to investigate the effects of dioxin, as the most toxic component of Agent Orange, because it is impossible to perform many fundamental experiments on humans. This is particularly true of research that involves exposing the living experimental subject to such a toxic material as dioxin. There is no satisfactory way to determine, for example, how the body can rid itself of the toxic material except to examine this phenomenon in several species. The results obtained from this research are then compared with what is known to occur in man.

The VA is seeking sources of information about Agent Orange and dioxin that will help detect and treat possible ill effects from contact with them. Any information clarifying the effects of exposure to these chemicals will be used to decide whether to compensate veterans. Because of the differences between various animal species and man, however, the VA does not accept the result of animal studies unsupported by results from studies of humans as satisfactory evidence for paying compensation to veterans claiming exposure to Agent Orange.

Question 6. The VA literature review indicated a complete lack of knowledge about the effects of Agent Blue. Why were no research proposals approved for the study of the chemical contaminant in Agent Blue, cacodylic acid.

(a) A research project involving the interaction of Agent Blue (cacodylic acid) and alcohol was not approved. Why, and would the VA reconsider this specific research submission?

Answer. No research studies concerning Agent Blue and cacodylic acid were funded in the Spring round of scientific review of animal model studies of the toxic effects of herbicides. Five such studies were submitted to the scientific review panel; none of the five was considered of sufficient scientific merit to warrant support as

submitted. All principal investigators who are not funded in the VA research program are sent copies of the scientific reviews of their proposals. The five unfunded Agent Blue investigators have been informed that they may reapply for support through the normal merit review process with a deadline for resubmission of the revised proposals of October 15, 1982.

CHAIRMAN MONTGOMERY TO DR. VERNON HOUK

1. Considering that the White House Work Group Science Panel, OTA; and the VA Advisory Committee had already endorsed the second UCLA protocol, do you feel it was necessary for yet another review by the National Academy of Sciences?

(*a*) Wouldn't this decision to seek another review further delay the commencement of the VA study?

Answer. The Science Panel did not endorse the second UCLA "protocol." It endorsed the proposed design of the study but this was not accepted as a protocol. The Science Panel reviewed the UCLA response dated April 28 to the Science Panel's comments to UCLA's initial submission. At the June 10, 1982, meeting of the Science Panel, it was concluded:

"The Science Panel reviewed the revision of the Agent Orange Epidemiologic Protocol submitted by UCLA to the VA on April 28, 1982. . . .

"In general, though there are specific responses to our review in some instances, what was returned is not as yet an acceptable protocol. The Panel recommended that the VA convene a group of consultants to prepare a protocol for the pilot study for review by the various reviewing bodies."

In a study as large and scientifically complex as the one proposed, it is not unusual to seek advice from the National Academy of Sciences. Though it may have delayed the commencement of the study, a short delay would be worhthwhile if it made the study more sound.

2. Do you personally believe it was necessary for the questionnaire and physical exam components of the study to be withheld from the public?

(*a*) If yes, why?

Answer. I think it was necessary to withhold the questionnaire and physical examination components of the study from the public to avoid potential undue bias. If the public were aware of the questions prior to the time of administration of the questionnaire, it is possible that individuals or groups work on preparing advance answers which would not accurately reflect the study participants' spontaneous responses and therefore be a potential source of bias or inaccuracy. This possibility would be eliminated by not making the questionnaire public. Physical examination results may be subject to the same bias.

(*b*) Couldn't false questions be utilized in the procedures to conceal the real interest of the researchers?

Answer. False questions are sometimes utilized by epidemiologists to detect individuals who may be severely biased and are responding consistently in one direction to prove a point. Such questions would help detect some instances of bias but would not be fully protective in a situation, as outlined above, when organized individuals or groups had sufficient lead time to work an advance preparation.

THE AMERICAN LEGION,
Washington, D.C., November 10, 1982.

Hon. G. V. MONTGOMERY,
Chairman, Committee on Veterans Affairs, House of Representatives, Cannon House Office Building, Washington, D.C.

DEAR CHAIRMAN MONTGOMERY: The American Legion is pleased to respond to your request for additional information regarding our ongoing efforts to monitor the Veterans Administration's Agent Orange examination program.

In June 1980 we initiated a project wherein a questionnaire was developed and disseminated to Vietnam veterans nationwide through our network of Department Service Officers and American Legion Officials interested in the Veterans Affairs and Rehabilitation program, for the purpose of determining whether or not individuals reporting to VA medical care facilities claiming exposure to Agent Orange are being appropriately examined, and that the examining physicians are demonstrating compassion and thoroughness in the way they receive, examine and treat all Vietnam veterans who present themselves alleging dioxin exposure.

To further monitor the examination program, our Field Representatives were instructed to take a close look at the examination criteria and the attitude of the examiners during site visits to VA medical centers and outpatient clinics.

Initially, the examination program was found to be disorganized and inconsistent. However, some improvements were noticed as steps were taken by VA Central Office officials to educate the "environmental physicians" who were designated to conduct the examinations.

Early on it was determined that the biggest complaints by the Vietnam veterans seeking examinations were the length of time between scheduling the exam and the date on which it was actually completed; inflexibility in the scheduling (many of the veterans could not afford to be absent themselves from their employment to undergo the examination during normal business hours); and the fact that they were not being advised of the results of the exam, regardless of whether they were positive or negative. To the credit of VA, and particularly, the Special Assistant to the Chief Medical Director for Environmental Medicine, after we brought these deficiencies to his attention, the backlog of examinations was reduced and steps were taken to monitor the situation; alternative scheduling was implemented at some facilities so that veterans could receive examinations in the evenings and on weekends; and all stations were instructed to advise the Vietnam veterans of the results of the exams both in person and by written correspondence.

There does currently exist a certain number of inconsistencies in the examination program. In some VA medical centers the responsibility for conducting the examinations is divided among several physicians and in others they are completed primarily by one individual. It has also been reported that at some facilities the examinees are seen by nurses and physicians assistants.

The most frequent complaints we are currently receiving on our questionnaires follow.

A substantial percentage of the Vietnam veterans who have submitted completed questionnaires within the past year have stated that they were not asked to provide a medical history during the examination.

Another major complaint we receive is that the examining physicians were not knowledgeable about Agent Orange. As far as the Legion is concerned, it is inexcusable for any VA employee involved in the Agent Orange examination program not to be able to advise the veteran examinees of what is currently known about Agent Orange, as well as the research projects that are either now underway, or in the planning stages. This would certainly help ease the apprehensions of many of the Vietnam veterans and their families who are seriously concerned about possible health consequences.

We have also been apprised on a number of occasions that the Vietnam veterans presenting for examinations are generally not satisfied with the care they receive. This could very well result from the attitudes of the personnel the veterans come in contact with during the course of the exam.

The complaints that we hear are not always from those veterans receiving the examinations. Our Field Representatives have heard VA physicians express dissatisfaction about the Agent Orange examinations being added to an already heavy workload with no additional support funding.

The American Legion will continue monitoring the Agent Orange examination program as long as it is in existence. It is realized that the problems we have mentioned do not exist at every VA medical care facility. We will make every attempt to elicit completed questionnaires from as many Vietnam veterans who have undergone the examination as possible, so as to determine exactly where the problems do exist. It is continually pointed out in our written and oral communications that it is important that the forms be completed by individuals who were satisfied with their examinations as well as those who were not satisfied.

The effect of Agent Orange on those veterans who were exposed to it while serving in Vietnam is a serious concern of the American Legion. Not only will the collected information aid in the identification of any VA medical care facilities at which inconsistencies exist, but it will also enable the Legion to assist in the development of remedial legislation, to make suggestions to the VA concerning ongoing procedures, and be more effective in assisting individual veteran claimants.

The American Legion appreciates the opportunity to provide you with this information.

Sincerely,

JOHN F. SOMMER, Jr.,
Deputy Director, National Veterans Affairs and Rehabilitation Commission.

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